AN

IMPROVED METHOD

OF OPENING THE

TEMPORAL ARTERY.

ALSO, A

NEW PROPOSAL

FOR EXTRACTING THE

CATARACT.

WITH

DESCRIPTIONS and DELINEATIONS of the INSTRUMENTS contrived for both Operations.

By the AUTHOR, when a Student at Edinburgh.

TO WHICH ARE NOW ADDED,

A MISCELLANEOUS INTRODUCTION, and CASES, and OBSERVATIONS,

Chiefly tending to illuſtrate the good Effects of ARTERIOTOMY, in various Diſeaſes of the Head.

By the Same AUTHOR.

Hæc meminiſſe juvat.

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M,DCC,LXXXIII.

THE

ADVERTISEMENT.

I Hope soon to publish what I have further to observe on the subject of Arteriotomy; as the materials, for such a work, are already in my possession.

I am preparing for the press a new and improved edition of my Treatise on the Kinkcough, with an Appendix, containing an Account of Hemlock and its Preparations.

It is but just, at this distance of time, once more to remark, that

hemlock

hemlock continues to be uſed for the kinkcough, and with ſo much ſucceſs, that it may truly be conſidered as one of the ſafeſt, and moſt certain, cures in phyſick.

LONDON,
Lower Groſvenor-Street,
Auguſt 14, 1783.

Wm. Butter.

THE

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MIS-

A

MISCELLANEOUS INTRODUCTION.

I.

WHEN Doctors David Clerk and Colin Drummond introduced the opening of the Temporal Artery in the Royal Infirmary of Edinburgh, that operation was ſcarce heard of, as being practiſed in Scotland; and it was little more cultivated, ſo far as I could find, in other parts of the Britiſh Empire. Indeed, the opinions which prevailed, at that time, concerning this operation, various, oppoſite, and all of them groundleſs,

are, even now, ſufficient proofs of its having been, then, in general diſuſe. While ſome maintained, that little blood could be got from the Temporal Artery; others, with equal confidence, affirmed, that blood could be got in ſufficient quantity, but that the ſtopping of it was ſo difficult as to render the operation dangerous. There was a third ſet of Speculatiſts, who declared, that the difficulty, or the danger, which ever it might be, was not worth encountering; as every advantage, ſuppoſed to reſult from the opening of an artery, could be attained by the opening of a vein. This, I ſay, was the ſtate of the publick ſentiments, or rather prejudices, with regard to Arteriotomy, when my learned and worthy friends began to preſcribe it in the cure of diſeaſes. I was then a ſtudent of phyſick in the univerſity, and aſſiſtant to thoſe gentlemen at the hoſpital. And though the

per-

performing of operations was, of courſe, no part of my province; yet I voluntarily and zealouſly made it my buſineſs to open arteries, as often as occaſion ſhould offer, that I might be enabled to throw light on a ſubject, which appeared to me not only very curious, but very important.

The improvement of the operation having been my firſt object, I ſoon drew up a method of opening the Temporal Artery; which I afterwards gradually corrected from obſervation. After having performed this operation a good many times, I was further induced to make experiments on living dogs; with a view of proſecuting hints that could not otherwiſe have been cleared up. All thoſe helps, at length, enabled me to take a comprehenſive practical view of arteriotomy: and the reſult of my enquiries was as follows.

A ſufficient quantity of blood can always be obtained from the Temporal Artery: and the blood can, at any time, be ſtopped with certainty, and with eaſe.

All acceſſible arteries may be opened without danger.

The uſual methods of ſtopping hemorrhages are not founded on juſt principles.

The baſtard aneuriſm is not a neceſſary conſequence of a pricked artery.

The uſual method of treating the baſtard aneuriſm is capable of great improvement.

Arteriotomy is preferable to phlebotomy in the cure of diſeaſes; and for reaſons very different from thoſe which are

are aſſigned by the learned Doctor Freind and others.

When I took the degree of Doctor in ſixty-one, I had choſen Arteriotomy for the ſubject of my Inaugural Diſcourſe; in which the preceding, and other topicks, were diſcuſſed; and which I defended at my publick examination.— While that diſſertation * was in the preſs, I repeated publickly the moſt conſiderable of my experiments; and performed others for the firſt time. I opened the radial artery. I alſo attempted to open the carotid, in a caſe where arteriotomy had been preſcribed. I had even gone ſo far as to make the tranſverſe inciſion: but, as the young man became faint before the artery was brought to view, I neceſſarily deferred the compleating of the

* Diſſertatio Medica et Chirurgica de Arteriotomia.

the operation till the next day. This affair instantly made much noise: and the Managers of the Royal Infirmary shewed their sense of apprehension, by desiring that I might not go on with the operation. Upon this, I told the physicians, surgeons, and others of my friends, who had honoured me with their company, that they might see the same experiment in a dog; which I had already performed by myself several times successfully; and which, I hoped, they would look upon as equally conclusive. Accordingly, having extended a dog on a table, provided with staples for securing his extremities, I made a longitudinal incision, large and deep, in his neck; and, after exposing the carotid artery fully to view, made an opening of a line and a half in length; and the blood streamed forth by jets, and to a great distance. I then stopped the blood: and the same gentlemen saw the

the progreſs of the animal's recovery, which was ſpeedy and without interruption.

Having thus given a brief hiſtory of arteriotomy as far as I am concerned in it, I ſhall now inſert a general method of opening arteries, with deſcriptions of the principal inſtruments, extracted from my diſſertation; and which it is unneceſſary to tranſlate, as it can only be uſeful to practitioners in phyſick or ſurgery.

II.

Aſt quoniam, omni in caſu, arteriam punctim vulnerare, inſtrumentum eâdem qua adigebatur directione, iterum retrahendo, commodiſſimum erit; ferramentis hunc in finem aptatis chirurgus inſtruatur oportet. Comparentur itaque plura ejuſdem formæ; quibus la-

tera

tera nempe lineis parallelis clauduntur, et cuſpis triangularis eſt. *Vid. Fig.* 1. Omnia, eâdem, qua phlebotomus vulgaris, craſſitie polleant. Quoad latitudinem vero; inter ſe diſcrepent a linea dimidia ad lineam unam et dimidiam et ultra. Mucro triangulus acutiſſimus ſit: latera parallela ſint obtuſa. Alterum quoque conficiatur inſtrumentum ex dictis minimo conſimile, niſi quod ſecandi omnino exors eſt; atque ex ipſius uſu Conductor appellari poteſt.

Hiſce ita comparatis, atque faſciis idoneis et cæteris pro loci, quo deliteſcit arteria, ratione inſtructis, hunc in modum operationem aggrediatur chirurgus.

§ 1. Nudanda eſt arteria, tranſverſa partium ſuperimpoſitarum ſectione.

§ 2. Punctim,

§ 2. Punctim, modo jam memorato, petatur vas; atque ita ut axi vasis sit parallelum vulnus.

§ 3. Arteriis, occipitali, temporali, vel etiam radiali, vulnus, quovis ferramento, infligatur.

§ 4. Quoniam vero sanguinis obturatio ab ejus principio glutinoso pendet, et hoc, pro reliquorum sanguinem componentium ratione, parvum, haud semel deprehendimus, ita ut exinde ipsa venarum sectio molestissima fuerit; in carotide aperienda, ferramentum lineam dimidiam tantum latum primo usurpare, et deinde, prout sanguinis crasis se habeat, ad alia recurrere aptius erit.

§ 5. Ut alterum in alterius locum rite succedat, foraminis augendi gratia, ei prius immittatur Conductor, et secundum hunc

hunc expedias ferramentum majus in idem vulnus.

§ 6. Ut plurimum ſanguis inter detrahendum ſubinde ſiſtit: ut hoc præcaveatur, vulnus e re nata, ſpongia ex aqua tepida detergatur oportet; vel thrombus ilico removeatur, Conductorem vaſi immittendo.

§ 7. Sanguinis miſſione peracta, vulneris labia ſibi invicem applicentur, atque per aliquot minuta, pollice ſuperimpoſito, in hoc ſerventur ſitu. Deinde lintei carpti plica una vel altera admoveatur, ſuperque illud injiciatur faſcia idonea, cavendo, quantum fieri poteſt, ne vaſis vulnerati diametros arctetur.

§ 8. Nulla per quatuor vel ſex dies repetatur deligatio, niſi forſan relaxata fuerit; et totum hoc tempus ſeſe omnibus abſtineat

abſtineat æger, quæ vel motum vel molem ſanguinis inſigniter adaugeant.

Atque hæc de arteriis generatim inci-dendis ſufficiant. *Alibi quæ in primis ſervari debent, prout hæc vel illa arteria ſit ſecanda, exponam* *.

III.

That I may, in part, make good this promiſe, I now give to the publick the following Improved Method of opening the Temporal Artery, exactly as it has ſtood for at leaſt theſe five-and-twenty years. And I think this publication particularly incumbent on me at this time; as I find that ſome difficulties have lately attended the practice of Arteriotomy, which the peruſers of this Method will al-

* Diſſert. cit. p. 14, &c.

ways

ways be able to prevent or remove. And though this method renders the operation perfectly convenient and manageable; yet it is but juſtice particularly to mention here, what cannot be controverted, that during all my experience of opening arteries at Edinburgh, even before the New Star-bandage was contrived, in not ſo much as a ſingle inſtance was that practice hurtful either by hemorrhage or in any other way. On the contrary, I ſaw with pleaſure that patients in general bore the loſs of blood from an artery better than from a vein; and likewiſe that a profuſe diſcharge by the former was never followed by that laſting languor and debility, ſo certainly the conſequences of an equal waſte by the latter. I ſay, I made thoſe obſervations with pleaſure; becauſe they were new, and capable of being put to good uſe in practice.

IV.

IV.

Cafes and obfervations are added, through an earneft defire of raifing arteriotomy to its proper rank as a remedy in the cure of difeafes. If feveral of the cafes that are here publifhed have no connection with this operation; yet they always relate to the difeafe in queftion, and tend to improve medical practice. Some, no doubt, will think that I have given too few inftances of the fuccefs of this operation from my own private practice: and every reader may fee, that I have not ordered it in cafes where I have ftrongly recommended it. As to the firft remark; I anfwer, that the cafes adduced are fufficient to prove the excellencies attributed to arteriotomy: and the proof is the more unqueftionable, that it is chiefly taken from the publick practice of an hofpital, and where it is ftill upon record. For the

the reſt, I am conſcious that I have hitherto done every thing in my power * for the advancement of this generous remedy. I hope that others of the profeſſion will lend their aſſiſtance: and, if they join heartily in their cooperation, there is little doubt, that arteriotomy will now come into general uſe.

V.

The Paper on the Cataract is another juvenile production, which I beg leave alſo to deliver untouched to the publick. The ſtrictures on the uſual operations were all drawn from what I had ſeen. The new operation is a propoſal which has

* Quantumvis autem operatio hæc rationi congruat, vereor ut unquam veniat in uſum, quia ſuaſor ejus periclitatur ne *per aliorum incuriam* famæ ſuæ officiat. J. Freind. Hiſtor. Medicin. L. B. 1734. p. 169.

has probability on its ſide; but has never yet been tried in a living ſubject. In the year fifty-five, Mr. Young, afterwards Doctor Young, happened, in the month of his attendance, to have ſeveral cataracts to extract at the Infirmary: and he offered to make trial of the Cutting Forceps. I can not now recollect the particular reaſons for my having declined that gentleman's offer: but I ſhall be glad to hear when the inſtrument comes into the hands of any other gentleman as well qualified as he was, either for doing juſtice to the contrivance, or ſupplying its defects.

VI.

My firſt publication, a Method of Cure for the Stone, chiefly by Injections, took its riſe from the following accident; which is the *hint* alluded to in the

ſecond

ſecond page of that Tract. The late Doctor Whytt brought a ſurgeon with him one day to the infirmary, to try, whether lime-water could not be injected into the bladder, by overcoming the power of the ſphincter through the force of the influent liquor: but they deſiſted without being able to effect their purpoſe. I, who happened to be a by-ſtander, ſaw that the ſurgeon's inſtrument was only a common clyſter-bag-and-pipe; and that, beſides, he had overlooked precautions which ſeemed abſolutely neceſſary to his ſucceſs. As ſoon, therefore, as thoſe gentlemen were gone, I meditated meaſures for injecting into the bladder, in the manner which they had propoſed. And in no great length of time, unaſſiſted, and *undirected*, I brought that matter to the deſired concluſion. The whole has been long before the publick: and the means, there recommended, will always fully anſwer the ſeveral intentions.

VII.

VII.

While I was employed in this way, it occurred to me, that, in ſuppreſſions of urine, the method commonly in uſe for carrying off that fluid required too much ſkill and addreſs: for, as people afflicted with this diſorder were too often at a diſtance from perſons of ſufficient experience to perform ſuch an operation as it ought to be performed, I thought that an inſtrument, which ſhould require little or no ſkill to introduce it into the bladder, might be an uſeful acquiſition. Accordingly, to a tin pipe ſix inches and three quarters long, including its great end or head, and a male ſcrew on its point *(See Fig.* 2. A.*)*, I fitted a ſilver flexible pipe by means of a female ſcrew *(See Fig.* 2. B.*)*. This flexible pipe, excluſive of the female ſcrew, was three inches and a half long. The two

pipes, when joined together, meaſured ten inches and a half; of which the head, reſembling that of a clyſter-pipe, made five-eighths of an inch. The bore of this pipe was about one-tenth of an inch; and its diameter was of a correſponding thickneſs. When this inſtrument was introduced into the urethra, and was puſhed forwards with an equable and gentle preſſure, it readily accommodated itſelf to the curvature of that canal, and ſo paſſed with eaſe into the bladder. Beſides, for the convenience of ſuch as choſe to inject into the bladder by means of a pipe introduced the whole way, the head of this inſtrument was contrived ſo as either to ſlide upon the ſtopcock-pipe of the injecting bellows, or to admit of a bladder being tied upon it.

VIII.

VIII.

As this introduction is of a miſcellaneous nature, and, beſide, treats profeſſedly of the labours of my youth, I am naturally led to aſſert my claim to the having been the firſt in Scotland who publickly contended, that the Lymphatick Veins muſt be a ſyſtem of abſorbents. I did not take up this opinion from an accidental random experiment; nor did I catch a hint of it from any perſon; but drew it from anatomy, as it was then taught by the beſt maſters. I found that lymphatick veins were demonſtrated in moſt parts of the body*; but that lymphatick arteries were diſcovered in very few parts †, and, in theſe, only on account of a particular ſtructure. Thoſe veins, therefore, as they could not be ſuppoſed to be con-

* Haller. Prim. Lin. Phyſiolog. § 51.

† L. c. § 40.

tinued from arteries, which certainly did not exiſt ſince they were not to be ſeen, muſt of neceſſity be abſorbents: becauſe, all the veins, that have yet been diſcovered in animal bodies, are either continued from arteries, or are abſorbents; that is, begin with patulous orifices. Beſide, I could ſee a neceſſity for ſuch a mechaniſm, particularly in that very large ſecretion in the cellular membrane, in order to carry off the aqueous redundancy for the due elaboration of the fat.

Thoſe, and other, arguments, I made uſe of in ſupport of my doctrine. And, as a confirmation that I had entertained ſuch ſentiments, in the year fifty-ſeven, when, on a certain occaſion, I was endeavouring to overturn the Boerhaavian doctrine concerning the nature and ſeat of the Rhumatiſm, I make uſe of thoſe words. Neque in arteriis tertii ordinis, ſedem, quantum video, habet iſte morbus: merito

merito enim dubitatur, an, ubique in corpore, id genus vaſcula dentur nec ne.—Now, if it was deſervedly doubted whether the lymphatick arteries exiſted every where in the body, this muſt amount to a total diſbelief of thoſe regularly deſcending orders of veſſels, which Doctor Boerhaave was ſo fond of inculcating, as a ſtructure that generally takes place. If, therefore, lymphatick arteries made no part of the general ſtructure of the vaſcular ſyſtem, it followed, that wherever they were found, it muſt be where a particular ſtructure rendered them neceſſary. And, as the lymphatick arteries were found in much fewer parts of the body than the lymphatick veins, it ſurely required no great depth of thought to ſuppoſe the latter to be abſorbents. It is rather amazing, that an inference, ſeemingly ſo natural, ſhould have been ſo long of being made, that a fact, ſeemingly ſo obvious to a plain underſtanding, ſhould have

have lien ſo long concealed. Indeed, I believe that truth is, for the moſt part, within the reach of common underſtandings; and that men oftener fail, in their reſearches after it, by indulging an over-ſubtilty of inveſtigation, than from any other cauſe; as though, forſooth, nothing could be worth knowing that was not far fetched.

To what has been ſaid, it will be objected, that a man may have entertained opinions in fifty-ſeven, very different from thoſe which he may have held in fifty-three or four. But that my opinions were quite conſiſtent on this ſubject, for thoſe years, is proved from this, that I could have had no other rational principles for ſuppoſing the lymphatick veins to be abſorbents than thoſe which I have juſt quoted from Doctor Haller. And, that I actually maintained that doctrine ſo long ago, I give the following evidence, ex-

tracted

tracted from a letter, dated at Warwick, the twenty-eighth day of February, fifty-eight, which I received from my much esteemed friend, Mr. Thomas Beveridge. "I saw lately in one of the Reviews, an "account of A. Monro's Treatise upon "the lymphatick vessels; the discoveries in "which, they say, are strenuously claim-"ed by Hunter. But if there be none "other than what are mentioned in the "Review, I know one who has as "good a title to them as either of the two, "having, some years ago, heard the struc-"ture and use of those parts explained, in "the very same way that they are in that "specimen of Monro's book which I have "seen; by yourself, both in private and like-"wise in the society."--He means a society which held weekly meetings during the sitting of the Colleges, and was known by the name of the *Medico-Romana*; because the members wrote and conversed on medical subjects, and in the Latin tongue,

only.

only. This ſociety finally broke up on the eighteenth of February, fifty-five.

I ſet the greateſt value on this teſtimony of Mr. Beveridge, becauſe he was highly and juſtly regarded by all his acquaintance. It is well known, that probity, candour, and judgment, were the leading marks of his character. Beſide, he had not only read, but had thought and obſerved a great deal. Indeed his abilities were ſuch, that he muſt, had he lived, have made a conſiderable figure: but he died not long after this in the Weſt Indies. To conclude, I believe, in my conſcience, that the following ſtanza, is as applicable to my late friend, as it was to the illuſtrious ancient.

Ergo Quintilium perpetuus ſopor
Urget! cui Pudor, et Juſticiæ ſoror
Incorrupta Fides, nudaque Veritas,
Quando ullum invenient parem?

Hor. L. i. od. 24.

CHAP. I.

AN IMPROVED METHOD OF OPENING THE TEMPORAL ARTERY, AND A NEW APPARATUS, DESCRIBED.

AS arteriotomy is highly extolled by authors of great experience, judgement, and veracity, it muſt be owned, that, even before I performed the operation myſelf, I ſuſpected much, that no juſt reaſons could be aſſigned for its preſent almoſt univerſal neglect. And I can now ſay, after having performed it a great many times, that its diſuſe has been owing, if not to a falſe theory, entirely to the unſkilfulneſs of ſome operators; which produced the effects of daunting

daunting the more timorous, and of confirming others in their prejudices. For it could not poſſibly proceed from a want of ſucceſs in curing diſeaſes, where blood-letting was indicated; as, in thoſe caſes, I have generally obſerved arteriotomy much more effectual than phlebotomy. And I never ſaw any bad effects from the firſt, that were not owing to miſconduct: and even thoſe were ſo ſlight as to admit of a quick and eaſy cure.—We may, therefore, pronounce it as ſafe to open the Temporal Artery, at leaſt, as any vein of the body; if the method be duly obſerved, which I am about to lay down, with all the candour, and perſpicuity, which I am capable of.

I ſhall not, in order to ſwell this paper, and make a vain ſhow of erudition, trace this operation from the moſt early accounts, and point out the various methods of doing it. It may be enough to obſerve, that

that mine is different from every one of them, is very eaſy, very ſafe, and, by it, any quantity of blood can always be obtained: which circumſtances, being more than can be ſaid of any other, will, I hope, be a ſufficient apology for offering it to the publick, as under:

§ 1. The patient being conveniently placed to the light, the operator ſits down fronting the ſide which he intends to operate upon, ſhaves the temple, wipes it very dry, and then rubs it over with powder of chalk.

§ 2. Having diſcovered the artery, by its pulſation under his finger, and made a dot with ink on each ſide of it, (about the ſame height with the top of the ear) ſo as to leave the diſtance of one half, or three fourths of an inch, between them, he directs the patient's head to be held by an aſſiſtant.

§ 3. Then

§ 3. Then pinching up the ſkin with his finger and thumb below where he intends the inciſion, while the aſſiſtant does the ſame above, he runs a lancet through the two mentioned dots, and cuts the ſkin over it quite thorough.

§ 4. The operator next compreſſes the artery with his left thumb a little further up than the wound; wipes the wound with a bit of ſponge wrung out of cold water; and, having thus got a diſtinct view of the artery, opens it in a longitudinal direction, and with an elevation of the point of his lancet.

§ 5. Having drawn the proper quantity of blood, he brings the lips of the wound together, applies two or three folds of charpee to it, and fixes the bandage upon that; but ſo, that the pulſation may be felt equally free through the ramifica-

tions

tions of the Temporal artery after, as before, the application of the bandage.

Though I have pointed out a particular place for opening the temporal artery (§ 2); yet, in general, that veſſel ought to be opened wherever its pulſation is moſt conſpicuous. Sometimes, indeed, it is difficult to diſcover it by its pulſation. This much oftener ariſes from the deep ſituation, than from the ſmallneſs of the veſſel. If the pulſation be faint and circumſcribed, it is a ſign that the artery is ſmall, and that its ſituation is not deep. If the pulſation be more diffuſe, it may be taken for granted that the veſſel is not ſmall; but that the apparent weakneſs of its action is owing to the thickneſs of the ſkin and fat, and ſometimes, beſide this, to its being covered by that membrane which Winſlow calls *calote aponeurotique*, the aponeurotick cap.—In the laſt caſe, the operator may proceed notwithſtanding the ſeeming weakneſs

weaknefs of the pulfation; and, after having made the tranfverfe incifion, and wiped away the blood (§ 4), he will then fee the throbbing of the artery through the tenfe aponeurotick membrane. And, finally, he may cut both the membrane and the artery at once, by a longitudinal incifion; or each feparately, to wit, the former in a tranfverfe, and the latter in a longitudinal direction: both which methods I have ufed with fuccefs.—When the artery is fmall, the operator muft take care to open it fufficiently: and then he is to affift the flowing of the blood by the application of a cupping-glafs—The fame method is proper, where the artery, though big enough, has not been rightly opened at firft; and the orifice cannot be enlarged afterward, as the operator's view is difturbed by the trickling blood. But, I believe, the neceffity of cupping, on account of the fmallnefs of the veffel, will rarely happen (at leaft it has never yet happened to

me);

me); and the other caſe as ſeldom to an operator who keeps very ſharp lancets: and this is abſolutely neceſſary; for arteries are, in general, more looſely connected to the neighbouring parts than veins, and their coats are alſo more elaſtick. However, in moſt caſes, a ſpeedy evacuation (if that ſhould be preferred to a more ſlow diſcharge) is greatly promoted by the Cupping-glaſs: and the following circumſtance, relating to the uſe of it, merits particular notice. The blood, if the air has been much exhauſted, ceaſes to flow: which ſtoppage is owing to the compreſſion of the artery, partly by the inſtrument, and partly by the diſtention of the ſurrounding cellular ſubſtance. The rule, therefore, is, to exhauſt the air but moderately; and to raiſe the cupping-glaſs gently from below, ſo that ſtill no air may enter: and then the blood flows briſkly.

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The cutting of the ſkin, previous to opening the artery (§ 3.), is ſo abſolutely neceſſary, that I am inclined to think, that thoſe authors, who order an artery to be opened in the ſame way as a vein, have had but very little experience of the matter; for, if you endeavour to cut both the ſkin and the artery at once, you will readily fail in the attempt, at leaſt of opening the veſſel ſufficiently: and repeated punctures ſo fatigue and diſpirit the patient, that he cannot afterward bear the loſs of ſo much blood as otherwiſe he could have done; nay, he will ſometimes be apt to faint, before a ſingle ounce is drawn. Whereas, according to the method here recommended, the artery is not touched till once a diſtinct view of it is got: and then it is opened with ſcarce any pain to the patient. However, it muſt be obſerved, that, even in this way, the artery often ceaſes to bleed; which is owing to the gradual formation of a grumous plug

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in its orifice. But this inconvenience is eaſily prevented, or removed, by wiping the wound, from time to time, with a ſponge wrung out of warm water; or by introducing the point of a probe into the orifice. And the not adverting to this circumſtance ſeems to be a chief reaſon, why ſome imagine that little blood can be got from the temporal artery.

By preſſing the artery with your thumb, previouſly to its being opened (§ 4.), it is not only kept from ſhifting, but alſo its pulſation is rendered more evident. But care ſhould be taken that the ſkin is not puſhed, by this preſſure, out of its natural place; which is almoſt the only circumſtance that can render the continuance of it neceſſary during the flowing of the blood.

The wiping of the wound with a cold wet ſponge brings a ſtricture upon the

wounded veſſels; and ſo prevents the further efflux of blood, by which means the artery is expoſed fairly to view. It may, however, be worth while to remark, that the patient's blood is ſometimes ſo thin, that it oozes in conſiderable quantity from the whole ſurface of the inciſion. In ſuch a caſe the aſſiſtant is directed to wipe off the blood, and, immediately as he removes his hand, the operator plunges his lancet into the artery: or the operator himſelf may wipe the wound with a bit of linen rag wet with alcohol; which ſeals up the orifices of thoſe ſmall veſſels, till once he has opened the artery.

It is evident, from what has been ſaid, that there is one inconvenience which an operator ſhould wiſh to ſhun, when he makes the tranſverſe inciſion (§. 3.); and that is, the hurting of the artery by the ſhoulder of his lancet: for, when this happens, the veſſel does not bleed freely; while,

while, at the ſame time, it conſtantly pours forth as much of its contents as are ſufficient to obſcure its ſituation, and ſo not only retard the operation conſiderably, but render its ſucceſs precarious. It is moſt difficult to obviate this accident in fat patients; becauſe, in them, the ſkin cannot be eaſily pinched up. It is, however, accompliſhed, by making the tranſverſe inciſion with a lancet that differs from a common lancet in having one of its ſides to the very point quite ſtreight. *See Fig.* 3.

The ſize of the tranſverſe inciſion (§ 2.) ſhould be more or leſs, according as the cellular membrane happens to be more or leſs diſtended with fat.

The artery is opened in a longitudinal direction (§ 4.); becauſe, by a tranſverſe inciſion, it might be cut entirely through; which is one of the methods uſed for ſtopping blood.

When I firſt began to open the temporal artery, hemorrhage was no infrequent conſequence of the operation. This inconvenience I imputed to the uſe of the bandage commonly recommended. I, therefore, contrived a new ſtar-bandage: and, from my experience, it is preferable, in every reſpect, to the old.

The wound always heals by the firſt intention. At leaſt I never ſaw it do otherwiſe in my practice; except once that it came to ſuppuration, and continued running, like an iſſue, till I diſcovered the cauſe to be the great preſſure of the new bandage upon the wound. But being then of the common opinion, that a very conſiderable compreſſion was abſolutely neceſſary for ſtopping the blood, to prevent any remarkable ſuppuration for the future, I applied the machine below the wound: and this precaution had the deſired effect. Soon after, however, I had

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reaſon to ſuſpect, that no great compreſſion was neceſſary for ſtemming the blood; as I found, that the patients themſelves ſometimes ſlackened the bandage ſo far, that it could have little more effect than juſt to keep the dreſſings upon the wound; notwithſtanding which, the artery did not bleed. Upon obſerving this, I applied the bandage directly to the wound; but ſo that the circulation could not be diſturbed by it; for the pulſation was felt equally free through the ramifications of the temporal artery after, as before, the application of that bandage. And, as this ſufficiently anſwered the purpoſes both of preventing a hemorrhage and ſuppuration, I have ſince continued the ſame practice; and do now, after a number of trials, recommend it to others (§ 5.).

From the different circumſtances that may be gathered through this paper, it appears to a demonſtration, that the blood

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is ſtopped by a plug blocking up the wound made in the veſſel; and that all the bandage does, is to ſupport this plug, and keep it in its place, by hindering it to give way ſo eaſily to the reſiſtance from within. As a further proof of this, I have taken off the bandage an hour or two after it was applied, and made the patient ſit for a conſiderable time, having nothing but the charpee upon the wound, without any hemorrhagy happening. In theſe caſes, the mere adheſion of the lint was a ſufficient ſupport to keep the plug, or grume, in its place. Hence that trite, and ſeemingly unanſwerable, objection to arteriotomy, namely, the great neceſſary compreſſion after the operation, is fairly exploded; as it is evidently founded on the want of experience, and on the ignorance of the true method by which the blood is ſtemmed. Our wonder at the frequent practice, among the Egyptians, of opening arteries in different parts of

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the body, without any bad conſequence from the operation, may now likewiſe ceaſe.

In general, I find Ambroſe Paré's obſervation to be juſt, that the wound is healed in four or five days. But I would adviſe that the bandage be kept on a day or two longer, to prevent one other troubleſome accident; and that is, what authors call, a baſtard aneuriſm. It is owing to an effuſion of blood from the artery into the ſurrounding cellular ſubſtance; which, not getting acceſs through the ſkin, now healed up, gradually ſtretches it into a tumour. This diſorder is cured by the following treatment. Having, with your thumb, compreſſed the artery below, cut off the ſac cloſe by the ſurface of the ſkin (never touching the veſſel) with a ſharp ſcalpel; then dreſs the wound in the ſame way as after a recent blooding: and

and it is generally healed in much the ſame time, that is, in five or ſix days.

I have mentioned a bandage for ſtopping the blood after this operation. Order requires that I give a deſcription of this inſtrument. To convey a more clear conception of it, I ſhall begin with deſcribing all its parts ſeparately; and then ſhew how thoſe different parts conſtitute the whole.

The Description of the New-Star-Bandage.

The baſis of this inſtrument is two cylindrical rings of thin braſs, which juſt ſlide the one within the other. From their poſition they may be called the external and internal rings. They are each four tenths of an inch long. The external ring is eight tenths of an inch in

in diameter; and the other, of courſe, is ſomewhat leſs. The lower brim of the internal ring is formed into a female ſcrew. There are alſo two pointed prominences, in the ſame ſtreight line, upon this ring, correſponding to a longitudinal groove in the external ring.

Secondly, upon the upper end of the external ring, is ſoldered a plate with four equidiſtant appendages; each of which contains a tranſverſe ſlit, ſix tenths of an inch long. This plate, excluſive of the appendages, is circular, and an inch in diameter; but, including the appendages, it is an inch and four tenths broad. This, which from its ſituation may be called the ſuperiour plate, has a central hole.

Thirdly, the internal ring has a plate affixed to each end; the one, by ſolder; and the other, by a ſcrew. The former, which from its ſituation in the conſtructi-

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on of the inſtrument, may be called the middle plate, correſponds exactly, in ſhape and width, to the diameter of the ring; and has a female ſcrew in its center. The other plate, which is called the inferiour, as being the loweſt in the machine, is an inch and two tenths broad, and circular. It has a number of ſmall holes round its edge, for the purpoſe of affixing a bolſter, if thought neceſſary. A ring is ſoldered to the inſide of this plate two tenths of an inch in length. It is a male ſcrew; and correſponds to the female ſcrew which terminates the internal ring.

Fourthly, there is a ſteel ſcrew which, with its neck, meaſures ſeven tenths of an inch. The proportional length of this ſcrew to its neck is as nine to five. The part of the neck, next the ſcrew, is round, and of a length equal to the thickneſs of the ſuperiour plate. The reſt of the neck is angular, and adapted to a central hole

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in a round flat braſs button for a handle. This handle is kept on by a ſcrew-nail paſſing through the axis of the neck. A ſimilar nail is lodged in the lower end of the ſcrew.

THE MTEHOD OF CONSTRUCTION IS AS UNDER.

The ſcrew, being ſtripped of its nails and handle, is introduced into the female ſcrew of the middle plate. The nail is next put into the bottom of the ſcrew: and then the inferiour plate is ſcrewed on. This ring is now lodged within the external ring: and the neck of the ſcrew, appearing through the ſuperiour plate, is fitted with its handle. The head of the nail in the lower end of the ſcrew, being broader than the ſcrew itſelf, hinders the external ring to be puſhed off the ſcrew altogether. The prominences are to

confine

confine the internal ring to a ſimple progreſſive and regreſſive motion.

The machine, thus conſtructed, weighs about ten drams and a half avoirdupois. It is delineated in the following figure, with the ſuperiour and inferiour plates at their greateſt diſtance from one another.

FIG: IV.

A. The external ring.

B. The internal ring.

C. The ſuperiour plate.

D. The inferiour plate.

E. The handle of the ſcrew.

FIG.

FIG. V.

This figure exhibits a view of the bandage full-mounted, with the plates as near to one another as they can be brought.

Four ſtraps of linen tape are obſervable; of which two are long, and two are ſhort. The ſhort ones have each a ſmall buckle at their extremity. They are alſo fixt to the machine by means of buckles: for, as it is intended that they ſhould reach the oppoſite temple, and no further, they muſt be of different lengths in different ſubjects; and, therefore, buckles are neceſſary to ſhorten or lengthen them at pleaſure. As it is not requiſite to aſſign exact dimenſions to the other two ſtraps, or fillets, they are ſowed to the ſlits; and are alſo long enough to anſwer in every caſe.

DIREC-

DIRECTIONS FOR APPLYING THE BANDAGE.

The operator is to place the bandage, mounted as in the laſt delineation, upon the dreſſing (§ 5.); ſo that one of the ſhort ſtraps may paſs round the forehead, and the other over the head, to meet the opposite ſtraps, the one coming round the hind head, and the other from below the chin: and, while he is buckling thoſe on the temple, an aſſiſtant ſhould keep a hand on the machine, that it may not ſhift from its place.

The more effectually to ſecure the bandage, a bit of tape may be extended between the fore and hind head, and pinned to each of the ſtraps in its courſe.

Laſtly, the bandage is brought to a proper degree of tightneſs, by ſlackening the buckles, or turning the ſcrew, according as the caſe ſhall require.

N. B.

N. B. In my firſt contrivance, the middle plate was wanting; and the two others were ſoldered on. The ſcrew was of one piece; it moved upon the ſuperiour plate, and was faſtened to, but yet moveable in, the inferiour plate. This conſtruction is liable to ſome inconveniencies; which are obviated by fixing the male ſcrew, as in the machine ſo fully deſcribed above.

CHAP.

CHAP. II.

MEDICAL CASES SUCCESSFULLY TREATED.

SECT. I.

CASES WHEREIN ARTERIOTOMY WAS SUCCESSFULLY EMPLOYED.

All the Cafes preceding the year fixty are extracted from the Records of the Royal Infirmary of Edinburgh.

CASE I.

A Scrofulous Ophthalmy relieved.

THOMAS M'KURSEY, aged nineteen years, of a fcrofulous habit, has always been much troubled with fore eyes: and, for a month paft, both his eyes

have been inflamed. There is a thickneſs all over the right cornea: and ſome parts of the left are alſo offuſcated; but, oppoſite to the pupil, it remains quite clear. The right eyelids are much ſwelled; and he can ſcarce ſeparate them without the aſſiſtance of his hands, upon account of great pain in the upper one. Both his eyes water a great deal: and he has conſiderable heat, and pain, in them. With the right eye, he can only diſtinguiſh light from darkneſs. He ſees very well with the left eye; but it is very weak, cannot bear much light, and ſometimes a miſt comes before it. His noſe is ſwelled, and ſore internally, ſince his eyes began to be affected. His upper lip is alſo a little thickened. For ſome years his hands have been ſwelled: and the ſkin of them is a little rough, or hard, but there is no pain, or diſcolouring. His belly is regular. —He has been bled, and has uſed purges,

blisters,

blisters, eye-waters, and ointments, without advantage.

In the course of four months, and upwards, he tried a great deal of means, in this hospital, with very little relief. He was bled several times at the arm and neck, and once at the ancle, with the lancet. He was often bled at the temples with leeches. A seton was put in his neck. He used a great variety of purges, also blisters, great and small, for his head, eye-waters, and ointments, mercurial snuffs, warm bathing for his feet, a course of mercury, so as to promote a gentle spitting, sea-water, and lime-water.

October 19, 1752. The right eye is better; but the left is much inflamed, and painful.

Let the left temporal artery be opened.

October 21. His head and eyes are easier since the blooding.

October 22. His eyes are better, than they have been, for ſeveral days.

October 24. The artery broke open laſt night; and he loſt above eighteen ounces of blood from it, and about eight more this morning.

October 25. He continues better.

October 30. He loſt about ten ounces of blood by the artery laſt night. His headach is gone: and his eyes are a great deal better.

November 7. His eyes continue better. —From the opening of the temporal artery to this time, no other new remedy was adminiſtered. He drank lime-water, as uſual, every day; and got four of his purges at proper intervals.

CASE

CASE II.

A Headach cured, partly, by Arteriotomy.

David Frazer, aged twenty-two years, for about ſix weeks has been ſubject to violent pain of his head, but affecting, chiefly, the fore and back part of it. His pulſe is ſlow. He has no other complaint. His appetite is good. His belly is natural. —He has been bled, and has got two vomits, without advantage.

For the firſt three weeks after his admiſſion, into this hoſpital, he was bled at the arm, a ſeton was put in his neck, and a large bliſter was applied to his head. He alſo uſed ſome doſes of rhubarb.

October 16, 1752. He is no better. Let the temporal artery be opened.

October 17. Twenty ounces of blood were drawn from the left temporal artery last night. His pulse was full and quick at the time, and did not sink much with the bleeding. The headach was relieved by the operation, but returned afterwards. He fell into a sweat this day at eleven: and it continues. His pulse is full, soft, and quick.

Let him have the Diaphoretick Draught* immediately; and let him drink plentifully of warm thin liquors.

October 18. He sweated yesterday till the evening. His headach is easier. His pulse is calm, and not low.

Mix equal parts, of the Spirit of Nitre and the Peruvian Balsam together: and let

* All the Compositions, ordered, like this, only by name, are to be found in the Pharmacopoeia Pauperum of the Royal Infirmary.

his

his forehead be rubbed with a little of the compoſition, evening and morning.

October 19. His head was much reliev-ed for ſome time after the application: but the pain grew bad again. His pulſe is a little quick.

Let eight ounces of blood be taken from his arm; and let equal parts of powdered muſtard ſeed and the crum of bread be made into a poultice with ſtrong vinegar, and applied to his ſoles at bed-time. Continue the Balſam.

October 20. He was better all night while the poultices were at his feet.

Let the poultices be renewed at night, and continued all day to-morrow.

October 21. The poultices were of no ſervice in the night: and they were, there-fore, taken off in the morning. His pulſe is calm, and not low.

Continue the balſam; and repeat the arteriotomy.

October 22. He went out yeſterday; and the artery broke open of its own accord, and diſcharged, as was ſuppoſed, three or four pounds of blood, before it was ſtopped. His head is no better. His pulſe is a little quick, and not very low.

Continue the balſam.

October 23. The headach is ſtill bad: and is worſe in the afternoon. The application relieves it for a little.

Let him take an ounce of the Bitter Tincture of Rhubarb, and half an ounce of the Sacred Tincture, mixed, to-morrow morning.

October 24. Let him take half a dram of the following Electary every hour, beginning early in the morning.

Take of the Peruvian Bark, finely powdered, an ounce; crude Sal Ammoniac, in powder,

powder, a dram; and a ſufficient quantity of the Syrup of Lemon-juice.

October 26. The artery bled twice laſt night. His head is a good deal better.

Continue the Electary.

October 27. The headach is almoſt gone. He has a ſenſation of heavineſs in his ſtomach.

Omit the Electary.

October 29. The headach is quite gone. The artery diſcharged eight ounces of blood yeſterday. He is coſtive.

Let him have the Domeſtick Clyſter.

In the courſe of the eight following days, the artery burſt open ſix different times; but the quantity of blood loſt is not mentioned.

November 24. The artery is healed up: and he has been free from complaints for

for ſome time; only for a day or two he has not made his water freely.—For this complaint he was detained ten days longer; and was cured by the uſe of Linſeed tea, and ten drops of the Eſſential Oil of Juniper twice a day. He alſo uſed, once, a warm bath up to his middle.—He was then troubled with a pain in the ſmall of his back; for which a bliſter was applied. After this, he was diſmiſſed in good health.

CASE III.

An Ophthalmy cured.

JAMES BROWN, aged forty-one years, for ſix weeks, has been ſubject to inflammation of both his eyes, for which he can aſſign no cauſe. At preſent, his eyes are very red; but there is no great pain, or heat. His eyes water a great deal, and cannot bear much light. He has not been

able

able to diſtinguiſh one face from another theſe three weeks. He has no other complaint. His pulſe is calm. His appetite is good. His belly is natural.—He has been bled at the arm to twelve ounces, has been twice bliſtered, and has had three doſes of phyſick, within theſe three weeks. A ſeton was put in his neck the day before he came here.

June 2, 1753. Two pounds of blood were taken from the Temporal Artery, yeſterday, without occaſioning faihtneſs: and the inflammation, all to a little on the left eye, diſappeared during the bleeding. He continues as well to day. There is a ſmall ſpeck on each eye.

Let the left eye be fomented, four times a day, with warm ſpirit of Minderer: and let him have twenty-five grains of the Mercurial Laxative Pills every other night.

June

June 13th. The inflammation and pain of his eyes are entirely gone. The ſpecks ſtill remain: but the pupils are pretty free; and, he ſays, he ſees as well as ever he did.

He is deſired to keep his iſſue running for ſome time. He is to leave the hoſpital to-morrow morning.

CASE IV.

A Headach, and Ophthalmy, cured.

ANN MAY, aged nineteen years, ten weeks ago, after catching cold, was ſeized with a violent headach, and inflammation of both her eyes; which complaints continued much the ſame till within this fortnight, when ſhe was bled, at the Temporal Artery, to twenty ounces in this hoſpital. Immediately before ſhe was bled, the headach and inflammation were ſevere; her eyes watered a great deal, and could

could not bear the light; and were ſo dim, that ſhe could not diſtinguiſh faces, even when near her. She alſo complained of floating appearances before her eyes.—All theſe ſymptoms were greatly relieved during the blooding. The inflammation of both eyes diſappeared, and ſhe fainted after the quantity mentioned was drawn.—Upon coming to herſelf, ſhe ſaid, that her headach was gone, that her eyes were quite eaſy, that ſhe could diſtinguiſh faces and colours with eaſe, and that ſhe could perceive no remains of the floating. Specks were now diſcovered on each eye.—She continued thus without any complaint, except dimneſs, the conſequence of the ſpecks, and weakneſs of her eyes, till two days ago: ſince which, her head and eyes have been affected as before, though in a much leſs degree. The ſpecks are now greater.—She has large glandular ſwellings under the lower jaw, of the ſame ſtanding with her other complaints.

plaints. Her appetite is good. She is ſickiſh after meals. Her pulſe is calm. She is regular in her menſes. Her belly is natural.—Before the artery was opened, ſhe had been bled both at the arm and neck, had been bliſtered, had got ſeveral purges, and had a ſeton put in her neck, all without advantage.

June 19. Twelve ounces of blood were drawn from her Temporal Artery; and ſhe is better ſince.

In a few days, there were very little remains of the inflammation: but ſhe continued, for ſeveral weeks, in the hoſpital, on account of the ſpecks and glandular ſwellings. She chiefly uſed the Mercurial Laxative Pills; and received great benefit from them.

CASE

CASE V.

An Ophthalmy, and Hemicrany, cured.

JOHN SHAW, aged twenty-ſeven years, three weeks ago, received a ſtroke, with the bit of a bridle, upon the left eyebrow, more internally than its middle. The bruiſe, and wound, being very inconſiderable, healed in three days: but, immediately after the blow, the left eyelids turned livid, and the eyeball became bloodſhot; and continued ſo, without pain or diſturbing his viſion, for two days. Afterwards the inflammation increaſed, and was attended with violent pain of that eye, and inability of both eyes to bear the light: and, in ſix days, he loſt entirely the ſight of the left eye. The left eyeball and eyelids, ſtill continue inflamed: and the whole eye is greatly ſwelled. The lucid cornea forms an unequal, prominent, and

and opake tumour. This eye waters muc; and difcharges alfo a good deal of grofs matter, and has done fo from the beginning of the inflammation. He has had no pain in the eye thefe eight days: but, for this fortnight, he has been fubject to pains, which are fharp and fhooting at times, affecting the whole left fide of his head, and, fometimes that fide of the neck, but chiefly the ear and temple. His appetite is not very good. He is coftive.—He was bled, got one purge, and fomented the eye with a decoction of Chamomile, immediately after the accident; but has never ufed any thing elfe.

July 1, 1753. Let blood be taken from the left Temporal Artery; let an emollient poultice, with the Spirit of Minderer, be applied to the eye; and let him take a fcruple of jalap, with feven grains of calomel, to-morrow morning.

July

July 2. Twelve ounces of blood were drawn from the artery laſt night, which removed the pain of his head immediately, and entirely; and diminiſhed much the ſwelling and redneſs of the eye. He was even relieved before four ounces were taken. He was neither ſick nor faint with the bleeding. He continues better to day.

Let the poultice be continued.

July 4. He had ſix ſtools with the phyſick. His eye is more painful to day.

Continue the poultice; and repeat the purge to-morrow.

July 7. Continue the poultice; and repeat the purge to-morrow.

July 10. The inflammation is much abated.

Continue the poultice.

July 13. The eye is more painful and inflamed. The pulſe is quick.

Continue the poultice. Repeat the arteriotomy and the purge.

July 14. The purge operates.

July 15. The artery was opened to day: the eye was ſenſibly better before three ounces of blood were drawn; and it grew paler and paler till twelve were taken; when he became ſickiſh, but did not faint.

Continue the poultice.

July 18. Continue the poultice; and repeat the purge to-morrow morning.

July 20. Continue the poultice; and repeat the purge to-morrow.

He was then diſmiſſed free from all ſymptoms of pain or inflammation.

CASE

CASE VI.

A Fever from Cold. The violent Headach cured, partly, by Arteriotomy.

JOHN WHITTAL, aged twenty-ſix years, for theſe eight days paſt has been ſubject to ſevere headach, hard, dry cough, pain and oppreſſion at his breaſt, great heat and thirſt, with a ſevere looſeneſs. His pulſe is ſoft, and not very quick.—He imputes his complaints to cold. Hitherto little has been done for them.

January 26, 1754. He is much as yeſterday. His pulſe is a little quick, and oppreſſed. Let him be bled at the arm to twelve or ſixteen ounces: and, afterwards, let him have the Pectoral Bolus.

January 27. He is no better. He did not ſweat. The looſeneſs continues.

His pulſe is quick, and ſoft. His blood was not inflamed.

Let the temporal artery be opened as ſoon as poſſible; and let a bliſter be applied to his back, after he has been bled. Continue the Bolus

January 28. About ſixteen ounces of blood were taken; when his pulſe failed, but he did not faint. The blood is thick without the inflammatory cruſt. He is very ſtupid; and ſeems to be much as yeſterday. His pulſe is low.

Continue the Bolus: and let bliſters be applied to his ancles.

January 29. The looſeneſs continues. He is ſtill ſtupid, though not delirious. He coughs little now: but the pain of his breaſt continues. His pulſe is fuller and a little hard.

Continue the Bolus.

January

January 31. The loofenefs was fevere in the night. His cough is dry, and frequent.

Continue the Bolns.---Let him take a tea-fpoonful of the Pectoral Lohoch, as often as the cough is troublefome.—Let him have the White Decoction for common drink.

February 1. His loofenefs and thirft are lefs. His cough is eafier. His pulfe is not low, and but little quick.

Continue the fame method.

February 2. He is every way better. His pulfe is almoft natural.

Continue his medicines.

February 7. He had three loofe ftools in the night. His cough continues.

Continue the fame courfe.

February 11. All his complaints are gone; but the cough, which continues ſevere.

Omit his medicines. Let him take two large ſpoonfuls of the Lac Ammoniacum every night and morning.

He continued this medicine till the twenty-ſixth current, when he was diſmiſſed in good health.

CASE VII.

An Ophthalmy relieved.

JOHN ROSS, aged thirty-two years, for theſe ſix weeks has been affected with inflammation of his left eye. At preſent there is an offuſcation of the cornea lucida. That eye cannot bear the light; nor can he diſtinguiſh colours by it. He is otherwiſe well. He never was ſubject to ſore eyes formerly: and he can aſſign no cauſe for the

the present inflammation.---He has been bled at the arm, and both jugulars, has been blistered, and has used eye-waters, poultices, and ointments to the eye, without advantage.

June 8, 1755. The left Temporal Artery was opened about an hour ago. Before two ounces of blood were taken, his eye was relieved: and he fainted, when eighteen were drawn. His eye continues better.

June 9. The pain of his eye is gone; and the inflammation is less.

Let a poultice of bread and milk, sprinkled with warm Spirit of Minderer, be applied to his eye, and renewed every night.---Let him have a scruple of the Mercurial Laxative Pills, every other night.

June 16. His eye is better. He has, commonly, three stools from the pills.

Con-

Continue the pills and the poultice.

June 17. His eye is more inflamed.

Continue the pills and the application.---Let twelve ounces of blood be taken from the jugular vein.

July 2. His eye is better.

Continue the same course.

August 10. The pills do not purge.

Omit the pills: and let him take half a dram of the pills called *cochiæ* to-morrow morning.

After this he took two purges of Jalap and Calomel; and went out, on the twenty-second of the same month, free from complaints; except that a small speck remained on the cornea.

CASE

CASE VIII.

An Ophthalmy,

MUNGO MURRAY, aged twenty-two years, ſince February laſt, has been ſubject to inflammation of his left eye, which has been better and worſe at times. At preſent, the inflammation is conſiderable: and the eyelids are ſwelled. The cornea lucida is offuſcated. His eye is very painful, waters a great deal, and diſcharges alſo much groſs matter. He cannot open the eye without the aſſiſtance of his hand: and, when he does open it, he can ſcarce diſtinguiſh the brighteſt colours.—Since the beginning of the ophthalmy, the left brow and temple have been affected with pain. His pulſe is full, and quick. He is otherwiſe well; except that he has been affected with a dryneſs, and heat, in his noſe, ſince about the time that his eye became

firſt

first bad; and that he is troubled with a dry, itchy, eruption of two months standing.— He imputes the disorder of his eye, and nose, to cold; and thinks that the eruption proceeded from the drinking of runnet-whey.---He has been bled twice, and has used purges, eye-waters, and ointments: all which means gave relief at the time.

July 16. The Temporal Artery was opened this forenoon; and he fainted when six ounces of blood were drawn. But, before the half of that quantity was evacuated, the pain of his eye was much relieved, the inflammation was considerably abated, and he could open the eyelids, and perceive objects better. He has been continuing easier since. His pulse is still full, and quick.

Repeat the arteriotomy in the evening; and let him have twenty grains of Jalap and six of Calomel to-morrow morning.

July

July 17. Ten ounces of blood were evacuated by the ſame orifice. He continues much better.

July 20. His eye is more painful to-day.

Let him bathe the affected eye often with warm Spirit of Minderer: and let the pnrge be repeated in the morning.

July 22. His eye is better. The purge operated well.

Continue the Spirit; and repeat the purge to-morrow morning.

July 25. His eye continues better.

Continue the ſpirit; and repeat the purge to-morrow.

July 27. His eye is much better. He has ſometimes vomited and purged with his phyſick.

Con-

Continue the application; and let him take half a dram of the Mercurial Laxative Pills, every other night.

Auguſt 1. He continues better.

Continue the ſame courſe: and let a ſeton be put in his neck.

Auguſt 15. His eye is ſtill inflamed. He has commonly four ſtools with his pills.

Continue the ſame method; and apply two leeches to the left temple.

Auguſt 16. He bled plentifully.

Continue the ſpirit and pills.

September 9. His eye is more inflamed.

Continue the ſame courſe; and apply two leeches to the lower eyelid of the effected eye.

October 4. Having no complaint but gripes, all his medicines were omitted: and he got half a dram of rhubarb, at bed-time, previously to his dismission.

CASE IX.

An Amaurosis cured.

CHRISTIAN WIER, aged twenty-five years, was seized, a fortnight ago, with violent headach; which, in ten days, was suddenly accompanied with great swelling, and inflammation, of the right eye. All those complaints still continue the same. She has seen none with the right eye, since it became first affected. The right eyelids cannot be opened. There is a constant discharge of gross matter from that eye.--Since the headach began, she has all along been subject to pain of her back, sickness, great thirst, and heat, with costiveness.

She

She is troubled with a cough of a twelve month's ſtanding.

She can give no cauſe for her complaints. Hitherto nothing has been done for them.

She has been deprived of the ſight of her left eye, for theſe ſeven years, through an Amauroſis; which came on ſuddenly after a fever.

July 19, 1755. Let a pound of blood be taken from her arm immediately. Let the right eye be bathed with warm linſeed-tea, and afterward covered with the Saturnine Ointment, ſpred on linen.

Let her have the Decoction of Tamarinds, with a triple quantity of Sena, to-morrow morning.

July 23. Her eye is eaſier. She complains of the headach, and of pain in her ſide and back. Her pulſe is quick. She is coſtive.

Let

Let her be bled, at the ancle, to ten ounces.

Let her have the Purging Clyſter after ſhe is blooded; and the Diaphoretick Draught at bed-time.---Continue the applications.

July 24. Her head and eye were very little relieved by the blooding.

Let the right Temporal Artery be opened.

July 25. The Artery was opened about two hours ago; and ſix or eight ounces of blood were drawn, when ſhe fainted. Both her head and her eye were relieved, before the half of that quantity was taken; and ſhe contiuues a good deal eaſier.

Continue the dreſſings.

July 26. Her head and eye grew worſe laſt night.

Con-

Continue the applications; and let her have the Purging Clyſter.

July 31. The headach, and pain and inflammation of her eye are ſtill worſe.

Repeat the arteriotomy, and the Purging Clyſter.

Auguſt 1. She was bled at the left temporal artery laſt night: and not only the headach and inflamed eye are much better, but ſhe can alſo diſtinguiſh the brighter colours with the left eye, ſince that time.

Soon after this a Seton was put in her neck. And after continuing in the hoſpital, about a fortnight longer, cheifly on account of her cough, ſhe went out, enjoying a good degree of ſight from the left eye, which had been ſo long totally dark. The ſight of the right eye was quite loſt, through the thickening of its coats, and the confuſion of its humours.

CASE

CASE X.

A Headach cured.

Marion Riburn, aged forty years, ſince the middle of laſt April, is greatly diſtreſſed with headach, for which ſhe can aſſign no cauſe. She had no other complaint till about eight weeks ago, that it began to be attended with deafneſs, pain and noiſe of her ears at times, and a dry eruption over her whole body; which complaints ſtill alſo continue. And, for theſe three weeks, ſhe is affected with ſcotomy. The pain affects chiefly the opening of her head, forehead, and temples; and is worſt in the night. It begins as ſoon as ſhe lies down; and continues bad till ſhe riſes in the morning. She complains of wind in her ſtomach; which ſhe imputes to the uſe of a great many medicines for the headach. She is alſo troubled with the he-

morrhoids for these six weeks; and with pains in her joints for these eight days. The hemorrhoids are both external and internal; and bleed frequently. Her appetite has been bad since the eruption began. Her belly is bound. She has no other complaint. She has hitherto found no relief from medicine.

August 6, 1755. Let her take half a dram of the Stomachick Pills to-morrow morning.

August 8. Let the temporal artery be opened.

August 10. Four ounces of blood were taken from the Temporal Artery, about eleven this forenoon, when she fainted. The pain left her head while the blood was running: and she has kept free from it since; except now and then that it shoots a little.

August

August 11. Repeat the Pills, with ſeven grains of Calomel, to-morrow morning.

August 13. She had three or four ſtools from the pills. Her head is worſe to day. Her pulſe is quick, and fuller, ſince yeſterday.

Repeat the arteriotomy.

August 15. Six ounces of blood were taken to day from the occipital artery *; which evacuation has carried off the pain entirely.

August 16. She has ſhifting pains, in different parts of her back, ſince the headach left her.

She continued, above a month longer, in the hoſpital, chiefly on account of the eruption; but the headach never returned in that time.

* The Occipital Artery is opened in the ſame way as the Temporal; and the ſame Apparatus anſwers for both.

CASE XI.

An Ophthalmy cured.

Ann May, aged twenty-two years, is troubled with ſore eyes, of ſix weeks ſtanding. They are weak, inflamed, water a great deal, and cannot bear the light. The eyelids are alſo affected. She was formerly in this hoſpital for the ſame complaints, but in a much worſe degree. She was then cured; and continued quite well till this laſt attack; which ſhe imputes to ſitting up late at nights, and to her employment of dreſſing victuals over the fire. She is otherwiſe well. She has only been bled as yet.

April 11, 1756. Let the temporal artery be opened; and let her have an ounce of Glauber's Salt to-morrow morning.

April

April 12. Two pounds of blood were drawn from the artery laſt night. She was ſick, but did not faint. Her eyes were greatly relieved during the bleeding: and they continue much better to day, being quite free from inflammation.—— She got the purge about an hour ago: and it has not yet begun to operate.

April 14. Her eyes are quite well; except that they are ſtill a little weak, and a gummy ſort of ſtuff gathers in them.

After having taken two or three doſes of phyſick, ſhe was diſmiſſed free from complaints.

CASE

CASE XII.

A Headach and Ophthalmy cured, partly, by Arteriotomy.

AGNESS PRINGLE, aged twenty-ſix years, is affected with inflammation of her eyes, and violent headach of three weeks ſtanding; for which ſhe can give no cauſe. Her eyes water a great deal: and, as they cannot bear the leaſt light, it is difficult to know their true ſtate. Her menſes are partially obſtructed. She is otherwiſe well. She has been in this houſe more than once, formerly, for the ſame complaints.

November 3, 1757. Let the temporal artery be opened.

November 4. She fainted, when eight ounces of blood were drawn. Her head and

and eyes became eaſier, in a quarter of an hour, after the operation.

November 5. Let her be bled at the arm to ſix ounces: and let her take a ſcruple of the Mercurial Laxative Pills every other night.

November 7. Her eyes, though better, are ſtill much inflamed.

Continue the pills: and let her bathe her eyes with warm ſpirit of Minderer, every night and morning.

November 13. She complains of pains through her body.

Intermit her medicines: and let her take two large ſpoonfuls of the Diaphoretick Julep, every three hours.

November 15. The pain of her head and eyes continue. The other pains are abated.

Let

Let her take a dram of the Polychreſt Salt, diſſolved in half a pint of water, every morning.

November 28. Her head and eyes are worſe.

Continue the Polychreſt Salt: and let her be bled at the ancle to eight ounces in the evening.

December 1. She is no better.

Continue the ſolution: and let a ſeton be put in her neck.

December 9. Her menſes came on yeſterday; and left her again.

Intermit the Polychreſt Salt. Let her bathe her feet in warm water. Let her take a tea-ſpoonful of the Tincture of Saffron, and Elixir of Propriety, each equal parts, at night and in the morning.

December

December 10. She complains of headach, and other pains.

Repeat the Diaphoretick Julep, every three hours, as before.

December 15. The ſtitches are abated. The pain of her head and eyes continues bad.

Apply leeches to her temples.

December 19. Repeat the leeches in the evening.

December 20. Her head and eyes are better.

Let her uſe the Ointment of Tutty, with a double quantity of Camphor, as an application to her eyes.

December 24. Her eyes are worſe.

Continue the ointment; and repeat the leeches as before.

December 30. Her eyes are no better.

Continue the ointment; and repeat the Polychreſt Salt.

January 1, 1758. The left eye is very bad.

Continue the ſame courſe; and apply a leech to the left temple.

January 4. Omit the ointment. Continue the Salt. Let a poultice of bread and milk, ſprinkled with the ſpirit of Minderer, be applied to the eyes, and renewed every night and morning.

January 16. Her head and eyes are no better.

Continue the ſame method; and repeat the arteriotomy.

January 19. She was bled at the temporal artery to twenty ounces; and was relieved in the time of the bleeding; but more,

more, in an hour after: and ſhe continues better.

January 21. She complains of a faintiſh ſickneſs.

Continue the poultice, and Polychreſt Salt. Let her take two ſpoonfuls of the Cordial Julep, when faint.

January 31. She is troubled with ſickneſs, and pains through her body. Her eyes continue better. Her pulſe is full and quick.

Continue the ſame courſe.—Let her be bled at the arm to eight ounces immediately.—Let her have the Diaphoretick Draught at bed-time.

February 1. The pains continue.

Continue the ſame courſe.—Repeat the Diaphoretick Julep; and let her take it, every three hours, as before.

February

February 6. Let her take a double quantity of the Polychreſt Salt every day.

February 7. She vomits the ſolution.

Continue the ſame courſe: and let her take ten grains of Ipecuauanha, for a vomit, in the evening.

February 17. She is worſe to day.

Continue the Salt: and let it be diſſolved in a pint and half of water.

February 19. The Salt does not purge her.

Omit the Polychreſt Salt. Let ſix ounces of blood be taken from her arm. Repeat the Mercurial Laxitive Pills as before.

February 23. Her menſes appeared yeſterday, and ſtopped again. She is feveriſh, and is troubled with pains.

Intermit

Intermit the pills.—Let ſix ounces of blood be drawn from her ancle in the evening.——Repeat the Emmenagogue Drops at bed-time.

February 24. The courſes have not returned. Her pulſe is full.

Continue the drops: and let her be bled again at the ancle in the evening.

March 3. Continue the drops: and let her take fifteen grains of the powder of Ipecuauanha, for a vomit, in the evening.

March 5. She is diſmiſſed, her head and eyes being well; except that a ſmall offuſcation remains on the left lucid cornea.

CASE XIII.

A Fever from heat. The violent Headach removed by Arteriotomy.

Charles Burley, a lad, aged — years, three or four days ago, ſlept for a conſiderable time in the open air; during which the ſun's rays beat intenſely upon him. When he awaked, he had a ſenſation as though his head were in fire; and he has been in a fever ever ſince. He complains much of headach, ſickneſs, oppreſſion of his breathing, pain of his belly, pain and difficulty in making water, frequent fruitleſs efforts to ſtool, great heat, and thirſt. His pulſe is full and quick.

He has got two vomits for this diſorder, but nothing elſe.

July 19, 1758. Let ſeven ounces of blood be drawn from the arm immediately;

ately: Afterward let him have half the quantity of the Domeſtic Clyſter.

July 20. Let him have ten grains of Nitre every ſix hours.—Let him have a clyſter of half a pint of warm water.—Let him have an ounce and a half of Manna, diſſolved in water, to-morrow morning.

July 21. His head was worſe in the night: and he raved at times. He had one ſtool with the clyſter. He makes water more freely. A few minutes ago, his noſe began to bleed; which has relieved his head much.

Let his noſe be bathed with warm water immediately.—Continue the Nitre; and repeat the water-clyſter.

July 22. His head was worſe yeſterday in the evening: and his pulſe was low and quick.—Six ounces of blood were taken from the Temporal Artery, which relieved his

his head immediately, without altering the pulſe. His head is pretty eaſy. His pulſe is fuller and quicker.

Continue the Nitre: and repeat the Domeſtick Clyſter.

July 25. He has ſlept a great deal theſe two days. He is very ſenſible when he awakes; and complains of nothing. His pulſe is pretty calm, and not low. A good deal of bloody ſtuff has come from his noſe laſt night, and to-day.

Continue the Nitre; and repeat the clyſter.

July 26. He is much as yeſterday. He awakes only to aſk for drink, and falls aſleep again. He complains a little of his head to day. The pain and difficulty of making water are worſe.

Continue the Nitre: and let him take five grains of Camphor at night, and in the morning.

July

July 27. The ſleepineſs continues. The headach is gone. The ſtrangury is much leſs. His appetite returns. The thirſt is leſs. He takes his powders but ſeldom.

Continue the Nitre and Camphor.

July 28. He does not ſleep quite ſo much. The ſtrangury is gone. He has no thirſt. His pulſe is almoſt calm. He complains of nothing. The running at the noſe is ſtopt. He has had no ſtool theſe three days.

Omit the Nitre and Camphor.—Repeat the Domeſtic Clyſter.

July 30. The ſleepineſs is almoſt gone. His pulſe is calm.

He got a purge; and went out, in a few days after, quite well.

CASE XIV.

A Headach and Ophthalmy cured, chiefly, by Arteriotomy.

JOHN KER, aged forty-four years, complains of headach, and inflamed eyes, for these six months past. The cornea lucida of both eyes is much offuscated; so that he can only distinguish light from darkness with the right eye, and the brighter colours with the left. His eyes water a great deal: the pain of them is not constant; but shoots, at times, up through his head. He was formerly in this hospital for the same ailment; and was dismissed, cured, about three years and a half ago. He continued perfectly well till this relapse; for which he cannot, with any certainty, assign a cause.—He has a seton in his neck; and has been using purges, and other means, without advantage.

November

November 29, 1758. Let blood be drawn from the left temporal artery.

December 2. A pound and a half of blood was taken from the artery, yesterday. He was relieved in the time of the blooding: and, he says, he could open his eyes better than he had done since the beginning of his ailment.

Let his eyes be fomented, first, with warm milk and water, and, afterwards, with the Vitriolick Water, every night and morning.

December 5. Let half a dram of the Mercurial Laxative Pills be taken every other night.—Continue the applications.

December 20. He complains of headach. The pills do not purge.

Continue the same course.—Let him bathe his feet, in warm water, at night.

Let him have an ounce of the Bitter Cathartick Salt to-morrow morning.

January 13, 1759. A pound and a half of blood was drawn from the Temporal Artery, laſt night; which relieved his eye much in the time. It is a little more inflamed to day.

Continue the ſame method.

January 30. Omit the pills, and the vitriolick water.—Let ſneezing be promoted, by a grain of Turpeth Mineral, mixed with ſix grains of ſugar.

January 31. Let the powder be repeated every other night.

February 9. Let him have the Decoction of Tamarinds, with a triple quantity of Sena, to-morrow morning.

He took three more purges, at the diſtance of five days between each. When

the

the laſt was ordered, a poultice of bread and milk was alſo directed for the eye chiefly affected.

March 9. He was bled at the artery, to two pounds and above, this day, with conſiderable relief, and without ſickneſs.

March 15. Let the eyes be anointed, every night, with a little of the Ointment of Tutty with Camphor.

March 29. Continue the ointment: and let him have the Bolus of Rhubarb with Mercury, in the morning.

March 31. Continue the ointment: and let him take the Bitter Infuſion, with a triple quantity of Sena, to-morrow morning.

April

April 4. Continue the ointment: and repeat the Mercurial Laxative Pills, every other night, as before.

April 28. Omit the pills.—Let him take a dram of the Polychreſt Salt, diſſolved in a pint of water, every morning.

May 21. His eyes are well. He goes out to-morrow.

CASE XV.

Inflamed eyelids: and pain and weakneſs of eyes.

Helen M'Lean, aged twelve years, has been ſubject to pain, heat, weakneſs; and watering of her eyes, for theſe ſixteen months, without any cauſe known to her. The eyelids are affected internally. The eyeballs,

eyeballs, to appearance, are free from inflammation.

March 28, 1759. Let the Temporal Artery be opened.—Let her take an ounce of Glauber's purging Salt, to-morrow morning.

March 30. Nine ounces of blood were drawn from the Temporal Artery, when ſhe fainted. Her eyes are much better ſince.

She continued, in the hoſpital, above three weeks longer; during the greater part of which time, ſhe took the Polychreſt Salt every other day, by way of laxative. She had an accidental feveriſhneſs for ſome part of the time. She loſt no more blood.—She is ſaid to be diſmiſſed, relieved: but I believe, and the nature of the caſe makes it probable, that ſhe was cured.

CASE

CASE XVI.

An Inflammatory Headach cured, chiefly, by Arteriotomy.

In the year ſixty-four, I was conſulted for the Earl of Portmore's ſervant. This man laboured under a violent headach. His eyes were tender, and could not bear the light. The ſmalleſt noiſe aggravated the pain. His ſkin was warmer, and his pulſe was quicker, than natural.—The opening of the Temporal Artery proved the principal means of his cure.—Mr. Harriſon, of Derby, was the ſurgeon.

CASE XVII.

A Rhumatick Headach cured.

Miſs MARY ALLEYNE, of Loughborough, was diſtreſſed with an excruciating head-

headach, from which ſhe was hardly ever free. Her reſt was broken; and her fleſh and ſtrength were much impaired. She was, for ſome time, under my care for this complaint. She was bled at the arm, and at the neck, with the lancet; and, at the temples, by leeches. She uſed vomits, purges, bliſters, and a great variety of other means, without relief. At laſt the Temporal Artery was opened: and the pain left that ſide of her head, by the time that the operation was over. The pain continuing to affect the other ſide, as before, ſhe was bled, in a few days, on that ſide alſo, and with the ſame good effect: for ſhe was then quite free from the headach; and never afterwards had any return of it.—My worthy friend, Mr. Thomas Hunt, was the ſurgeon.

In the year ſeventy-ſeven, my advice was requeſted for the following patient, ſervant to the Reverend Mr. Dixie of Derby.

CASE XVIII.

A Hemicrany, and Hydrophthalmy, removed.

WILLIAM HAWLEY, aged twenty years, about ſix weeks ago, having, as he thinks, catched cold, was ſeized with a violent pain of the right ſide of his head, and right eye. In a fortnight, this diſorder was attended with dimneſs of, and miſt before, the eye. The ſymptoms, of dimneſs, and miſt, gradually increaſed, till the eye became totally dark; which, he ſays, happened juſt a fortnight ago. The pupil of this eye is much larger than the other,

other; and has not the leaſt motion, from the ſucceſſions of light to darkneſs. The ball of the eye is much enlarged; but ſtill retains its uſual form. Neither his head, nor his eye, are quite ſo painful as they have been. The pain is worſt about four in the afternoon; begins to abate between ſix and ſeven; and grows worſe again about nine in the evening. The headach is like as though the part affected were pulled one way, and then drawn ſuddenly back the other way. The pain in the eye gives him the ſenſation as though it were about to ſtart out of the ſocket. He is very cold, upon firſt going into bed, at night: but, after ſome time, he becomes warm, though not more ſo than natural. He ſleeps none after three in the morning, on account of the pain. The veſſels of the white of the eye are larger than natural. His pulſe beats ninety ſtrokes in the minute. He has a great appetite; which is natural to him. He is much addicted to the drinking

drinking of ale. He has two or three ſtools a day naturally.

He has been bled at the arm; and, at the right temple, with leeches. He has alſo uſed bliſters, and purges.

April 23. The temporal Artery was opened this forenoon; and it bled freely. After a pound and a half of blood was taken, he became ſick, and vomited, but did not faint. He was eaſier before the firſt cup was full: and, before the bleeding was over, the pain was quite gone. The two firſt cups are much ſized.

April 24. At noon. He has no pain in his head, but what ariſes from the bandage; which is rather too tight, but is to be ſlackened. His pulſe beats ſeventy ſtrokes in the minute. The firſt cup of blood has a ſizy concave ſurface. The ſurface of the ſecond cup is horrizontal, and not ſo ſizy.

fizy. All the reſt of the blood is of a florid natural appearance.

April 25. He ſlept very well laſt night. He is quite eaſy; and has had no return of pain. The ball of the eye is reduced almoſt to the natural ſize: but ſtill the pupil is large, and immoveable: and there is no return of ſight. The diſproportion between the eyes would ſcarce be perceived; only the upper eyelid of the diſeaſed eye moves more ſtraitly over it. He is otherwiſe well.

May 4. Both eyes appear the ſame as to ſize. He was out of doors lately, lying on the wet ground; and has lived, in other reſpects, irregularly. On the ſecond current, he began to loſe his appetite; which before was voracious: and, in the evening, he complained of pain in the left ſide of his head, ſickneſs, and vomiting of whatever he took. Thoſe complaints have been bad ever ſince: and what he throws

up

up is green, and very bitter. His pulſe beats ſeventy ſtrokes in the minute. He is very faint. He has had no ſtool theſe three days.—It is ſufficient to add, that he died, in a few days, with ſymptoms of great oppreſſion upon the brain, nothing having afforded him the ſmalleſt relief. —My good friend, Mr. Francis Meynell, was the ſurgeon.

SECT.

SECT. II.

Cases wherein the Extract of Hemlock was successfully employed.

CASE XIX.

A Quotidian Hemicrany cured.

Mary Tortishell, aged ſeventeen years, has been troubled with violent pain of the left ſide of her face, for a year paſt. The one half of her forehead, the temple, the cheek, and down her neck to about a couple of inches below the maſtoid proceſs, on the courſe of the ſterno-maſtoid muſcle, are the parts affected. The pain advances very little upon the hairy part of her head. It is an aching pain; and affects all the parts

parts juſt mentioned; but, chiefly, a little above the eyebrow, and the ſpot below the maſtoid proceſs. It is an in-ward pain, being not ſore to the touch. The part affected is, at preſent, ſwelled, but not diſcoloured. She is generally pretty free, and ſometimes altogether free, from pain in the day time: but, the moment ſhe lays her head to the pillow, at night, it begins with great violence; and gives her the ſenſation as though the part were on fire: and it is ſwelled, and fluſhed. For this reaſon, ſhe ſits up the greateſt part of the night, and gets no ſleep; except a little, towards morning, which is much diſturbed. If ſhe were to ly down in the day, the pain, ſhe ſays, would come on. She can only ly upon the ſide affected. She cannot, now, ſee ſmall objects with the left eye, ſo well as with the right; which ſhe imputes to the pain. She has no uneaſineſs from moving her head. She is often

troubled

troubled with wind: and the breaking of wind relieves a pain, in her left ſide, to which ſhe is often ſubject. She is very thirſty. Her appetite is pretty good. Her courſes are regular. Her belly is natural.

She had an ague about a year ago; ſince which her legs have ſwelled, till within this month: and, ſince the ſwelling diſappeared, the pain has been much worſe.

Changes of weather do not affect her. She has been, formerly, troubled with the toothach: and there is a rotten tooth, in the lower jaw, on each ſide of her head. She has uſed vomits, purges, bliſters, and other means, without advantage. The only thing that gives relief, is brandy put into the left ear.

October 17, 1771. Divide half an ounce of the Extract of Hemlock into forty-eight equal Pills: and let her take two of them every night and morning.

October 19. The Pills agree well with her, and warm her; for, ſhe ſays, ſhe was often cold before. She has had more reſt for theſe laſt two nights; the pain not having begun, till after ſhe had been ſeveral hours in bed.

Let her take three Pills twice a day.

October 21. On the nineteenth, ſhe went to bed at nine, and ſlept from ten till ſix in the morning; when ſhe roſe quite free from pain. ſhe once attempted to ſleep on the right ſide: but ſhe was obliged to deſiſt; as ſhe found, that the pain would have come on. Laſt night ſhe went to bed at nine; and began to fall aſleep about eleven; but had no ſound ſleep, on account of violent pain, with a ſenſe of heat over her left eye, and no where elſe. The ſame pain has continued all day.

Let her take four pills twice a day.

October 25. She has ſlept all night, for theſe three or four nights; and has no pain, now, but in her forehead; which is often violent through the day, and is accompanied with a ſenſe of heat, but no ſwelling. She ſtill cannot lie on the right ſide.

Let her take five pills twice a day, beginning this morning.

October 29. Her courſes came on laſt night. She ſeemed to mend faſt; and was a day and a night quite well: but, ſince laſt report, ſhe ſays, that ſhe is to the full as bad as ever, the pain having returned to the old ſpot, and having continued alſo in her forehead.

Divide half an ounce of the Extract into forty equal pills: and let her take ſix of them twice a day.

October 31. She reſted exceeding well, laſt night. She has pain, and weight,

in her forehead to day; but none in the fide of her head. Her menfes continue.

Let her take feven pills every night and morning.

November 2. She has had good nights fince laft report. The pain is not conftant now: it attacks her only two or three times a day; and lafts for half an hour at a time. The pain, when it comes, is now only in the fide of her face, and is attended with giddinefs. Her courfes continue.

Continue the pills.

November 3. She has had a good night. She had only one fit of pain to day: and it lafted a quarter of an hour. Her menfes continue.

Divide half an ounce of the Extract into forty-eight pills: and let her take eight of them every night and morning.

November

November 5. The menfes left her on the third, at night. She has only had one fit of pain fince laft report; and that was, yefterday, for about ten minutes. She only complains of being a little thirfty. Her tongue is clean. Her pulfe is calm.

Continue the fame method.

November 9. She took the laft of her pills, about feven this evening. She continues free from complaints: but fhe can not yet lie on the right fide; as, by that pofture, a fhooting pain is occafioned in the left fide of her face.

Let her take eight pills every night at bed time.

November 13. She continues well; and can lie longer, on her right fide, without inconvenience.

Let her take feven pills to night; and fix to-morrow night.

November

November 15. She has continued well till to day about eleven; ſince which time ſhe has had the uſual pain, and burning heat, over her left eye, attended ſometimes with giddineſs.

Let her take eight pills every night and morning.

November 17. She has good nights. The pain and heat of her left eye ſtill come in fits.

Let her take ſix pills thrice a day.

November 19. She has good nights: and the pain, over her left eye, is ſomething better.

Let her take ſix ſix-grain pills at night, and as many in the morning.

November 20. At noon. She awaked four times in the night, with ſevere pain, as formerly, in the ſide of her face; which laſted

laſted about half an hour each time. She is pretty well to day.

Let her take ſeven of the ſame pills immediately, and the ſame number at bed-time; and let her take ſeven, thrice a day, afterwards.

November 22. She had a bad day yeſterday. Laſt night was a good one: and ſhe is very well to day.

Continue the ſame method.

November 26. She is much better: but ſtill has ſome pain over her eye, and, ſometimes, vertigo.

Continue the ſame courſe.

November 30. She continues much better.

Continue the pills.

December

December 4. She continues to mend. Let her continue the pills in the ſame manner.

December 7. She has no complaint. She has a few of her pills remaining: let her continue them while they laſt.

December 29. She ſays, that ſhe is ſometimes free from pain, and, at other times, has a good deal.

Divide half an ounce of the Hemlock-maſs into forty-eight pills: and let her take five of them twice a day.

March 1, 1772. She has been free from complaints, ever ſince ſhe finiſhed her laſt pills, till within theſe four or five days, that ſhe has been affected with pain of the ſide of her head. The pain affects the prominence of the left cheek, immediately before the ear, and the ear itſelf internally. It is an aching, ſhooting, pain; and attacks

tacks her either night or day, but chiefly in the night, after her firſt ſleep; which, commonly, does not laſt above an hour. She is then obliged to ſit up the reſt of the night, on account of the pain, as alſo a tenderneſs of the ſide of her face, which cannot bear any thing to touch it. Sometimes the pain affects the right ſide of her face, in the very ſame parts; but never both ſides together. The pain begins with burning heat, which does not laſt long; and is ſucceeded by a coldneſs all over her. She has never any pain over her eye: but it is ſtill too weak to examine ſmall objects. She is otherwiſe well.

Let her take three five-grain pills of the Extract of Hemlock thrice a day.

March 2. She is no better. The pain is commonly worſt at night. The gums of the affected ſide, both above and below, ſwell, and ache, during the pain. Ex-

cept

cept at firſt, ſhe is cold and chilly during the whole of the fits of pain.

Let her take four pills thrice a day.

March 4. She is no better: and the pain affects her now over the eye.

Let her take five pills three times a day.

March 8. She is much better theſe two days. She has the pain in the ſide of her face, and ear, only for half an hour, between twelve and one in the night; and that over her eye, for as long, between eight and nine in the morning.

Continue the ſame courſe.

March 12. She has had no pain ſince laſt report; except for half an hour, each of the two laſt nights, between twelve and one o'clock.

Continue the ſame method.

March

March 16. She had no complaint till the fourteenth, between nine and ten in the morning: from which time, till between two and three this morning, ſhe had a great deal of pain. Her menſes then appeared, and continue: and ſhe has little or no pain ſince. She was ſick laſt night. Her belly is natural.

Continue the ſame courſe.

March 21. She has had no headach, ſince laſt report. Her menſes continue. She is troubled with pain of her ſtomach; which, ſhe ſays, is generally the caſe during menſtruation.

Let her take four pills twice a day.

March 25. The Menſes left her on the twenty-ſecond, at night. The pain of her ſtomach is gone. She had ſome headach from yeſterday morning, till this morning.

Con-

Continue the ſame method.

March 29. She has had no headach ſince laſt report. She was ſickiſh, for half an hour, yeſterday morning.

Continue the pills.

April 2 She has no complaint.

Continue the ſame method.

April 12. She has no complaint. Her courſes came on this morning.

Continue the pills.

April 19. She is in good health. Her courſes are gone: and ſhe had no diſorder during their continuance.

Let her pills be omitted.

This young woman never had any more returns of her diſorder. She is now married, and lives in Derby.

She uſed, in all, fourteen ounces of the Extract of Hemlock.

CASE

CASE XX.

Dimneſs of Sight, from an Albugo, cured.

WILLIAM SMITH, of Derby, aged 26 years, of a tall, thin habit, and by trade a jeweller, about Chriſtmas laſt, was ſeized with inflammation of his right eye, which laſted five weeks; and left a thickneſs of the cornea lucida, or, what is called, the Black of the eye, which ſtill continues. The whole cornea lucida is thickened, and offuſcated; but the inner, and lower, part of it is particularly affected, being quite opake, and of a colour reſembling milk a little diluted; and has a large blood veſſel running over it. He can only ſee the brighteſt colours with this eye. The pupil retains its motion. His appetite is good. He has a bad taſte in his mouth in a morning. He generally feels a load at his ſtomach after meals.

His

His belly is natural. The inflammation came on, from cold, during the uſe of phyſick. He uſed no means for it, beſides emollient poultices, and one purge.

June 13, 1773. Divide half an ounce of the Extract of Hemlock into ſixty pills; whereof one is to be taken, every night and morning, for two days; and then two are to be taken twice a day.

June 28. He thinks that the eye is ſtronger, and that the viſion of it is more diſtinct.

Divide half an ounce of the Extract into forty-eight pills; and let two of them be taken twice a day for two days; and afterwards three, twice every day.

July 15. Divide an ounce of the Extract into ninety-ſix equal pills: and let him take them, twice a day, as before.

Auguſt

August 2. The white ſpot is thicker, and ſeems to project from the ſurface of the cornea. The blood-veſſel is not ſo turgid. The ſight of the right eye continues much the ſame.

Let him have ſeventy-two more pills, to be taken in the ſame manner.

Auguſt 21. He ſees much better. The lucid cornea is now quite tranſparent; except the whitiſh ſpot, which continues much the ſame as at laſt report. He is improved in fleſh, ſtrength, and colour: and his digeſtion is alſo mended.

He has uſed in all two ounces and three quarters of the Extract; which is a leſs quantity than he ſhould have uſed, in the time, according to the directions. He continued this medicine, at times, a conſiderable while longer, with manifeſt advantage to his general health, but without producing any further change on the remaining albugo.

CASE

CASE XXI.

A Quartan Hemicrany cured.

Mr. Christopher Smith, of Morely in Derbyſhire, of a tall thin habit, and temperate, aged thirty-eight years, has been ſubject, for many years, to headachs, chiefly affecting his forehead, after drinking a little more than uſual, or after hard exerciſe, as much walking, or after catching cold. Thoſe headachs were attended with faintneſs, fluttering of his heart, feebleneſs, and trembling, of his limbs. He was moſt ſubject to them in warm weather. He always felt himſelf beſt in cold weather..

About nine weeks ago, he was ſeized with a ſtuffing of his noſe, and a ſort of confuſion of his head, as if he had catched cold. On the ſecond day of this ailment, having drank ſome ale, while on a journey,

journey, he was affected with very ſevere pain of his head. This, however, went off in a few hours: and he had a pretty good night. On the third day of the ſtuffing, at night, his left ear ached moſt violently, with the ſenſation of a crackling noiſe. This diſorder, in a day or two, was attended with pain in the vertex, or crown, of his head, alſo in the upper part of the left temple, amongſt the hair, and in the left ſide of the occiput, or hind head, about the ſame height with the maſtoid proceſs, and extending to within about an inch of it. During the firſt week of thoſe pains, he was ſo afflicted with their violence, that he could not bear the leaſt light, or noiſe, or even to ſpeak. The ſecond week, the pains became violent every afternoon, at four; continued ſo till ſix, or ſeven, in the morning; and then were eaſier, but not gone, till the uſual hour. On the third week, he began to have two tolerable days,

 and

and one bad one; which has generally been the caſe with him ever ſince. The pains always begin with chilneſs, yawning, and ſtretching; which laſt for half an hour: he is then warmer than uſual for an hour; but ſeldom or never ſweats. The pains are, ſometimes, worſt in the day; and, ſometimes, in the night. They are always eaſed by a recumbent poſture. He can never lie on the well ſide. His ear ſtill continues affected with the pain, and noiſe: and it is, alſo, become dull of hearing. The vertical pain generally begins, is the worſt, and affects the other places. The temporal pain begins ſometimes, but very rarely. The pains are ſometimes throbbing, and ſometimes ſhooting. They affect the left eye: and it waters, and never bears the light well. He commonly falls aſleep as ſoon as the pains abate.— Swallowing has never affected the pain of the ear. Sneezing ſcarce at all affects the pain of his head, even when at the worſt.

The

The left ſtern-maſtoid muſcle is ſtiff. It has been ſo, three times before, in the courſe of this illneſs: and the ſtiffneſs always laſted for two days. This is the ſecond day of the fourth attack: and the ſtiffneſs is, now, much abated. This muſcle is never ſore, nor painful, even to the touch; but it feels ſtiff: and, while this ſtiffneſs continues, he cannot turn his head, to the left, without the aſſiſtance of his hand.

For the laſt fortnight, he has been affected, for a little at the beginning of the fit, with violent palpitations; and, during the whole of it, with a ſhort dry cough. He is not entirely free, from this laſt ſymptom, in the intervals.

He has never been feveriſh. He has no thirſt. His appetite is pretty good. His ſkin is temperate. His pulſe is rather low, and beats ſeventy ſtrokes in the minute. His urine depoſes a ſediment like brick-duſt. He has, generally, a ſtool,

of a natural appearance, every day. His flesh and strength are not impaired.

His left eye was very itchy, for three weeks, before this disorder came on: and it became all over bloodshot, owing, in part, though not entirely, he thinks, to frequently rubbing it.

When he was about fourteen years of age, he was seized with a quartan ague; which continued, with little interruption, for two years. Within these fourteen years, he has had some attacks of a quotidian, in the spring season. He has, also, had two pleuritick fevers within these two years.

January 29, 1774, at noon. He has had a bad night. He was better in the morning; but he is worse again now, being affected with violent shooting pains, which oblige him, now and then, to hold his head between his hands.

Two large ſpoonfuls of the following mixture are to be taken every three hours, firſt ſhaking the glaſs. It contains eight ounces of ſpring water, half an ounce of proof ſpirit, and two drams of ſugar, with a ſcruple of the Extract of Hemlock.

January 30. He has had a better night; but is not quite ſo well to day, as he was yeſterday. He has belched more wind than uſual. He obſerved a moiſture on his limbs this morning, for the firſt time: and he has made more water. It is turbid, and ſeems as if it would let fall a ſediment.

Repeat the mixture, with half a dram of the Extract of Hemlock.

January 31. He was pretty well yeſterday afternoon. He has had a good night; and continues eaſy and well to day, having only had, as yet, a few trifling ſhoots in his head. He is in good ſpirits; and has

a good

a good appetite. He has had one natural ſtool to day.

Repeat the mixture, with two ſcruples of the Extract.

February 1. He has only had a few inconſiderable ſhoots of pain ſince laſt report. He ſlept well in the night; and is in good ſpirits to day.

Repeat the mixture, with forty-five grains of the Extract of Hemlock.

February 2. The crown of the head, where he uſed to feel the chief pain, itched very much yeſterday. He had pain in his head, for two hours, laſt night: but it was ſo tolerable, as ſcarce to keep him from ſleeping. His left eye is ſtronger; though it became a little bloodſhot yeſterday, and continues ſo. There is ſtill a noiſe in the left ear: but the pain of it went with the other pains. He can now lie fully as well on the right ſide, as on the left.

left. He is lefs troubled with flatulency. His appetite is better. His urine is now of a ftraw colour, and without cloud, or fediment. It has been more copious than ufual, ever fince he began the hemlock. He has had a ftool every day, except yefterday.

Repeat the mixture, with fifty grains of the Extract.

February 3, at noon. He had fome little pain in the crown of his head, in the afternoon, yefterday; which lafted till bedtime. He flept very well in the night; but he is affected with the fame pain fince morning, and alfo with the ftiffnefs behind his ear. He was uncommonly cheerful, and laughed a great deal yefterday.

Repeat the mixture, with a dram of the Extract of hemlock.

February 4. He has had a good night. The pain is much lefs to day.

Con-

Continue the ſame method.

February 6. He was free from pain, the greateſt part of the day, on the fourth. He had a little pain, for an hour, that night. He has been very eaſy ever ſince. He ſleeps well in the night; and is in good ſpirits through the day.

Repeat the mixture, daily, with three ſcruples and a half of the Extract.

February 8. On the night of the ſixth, he had ſome little pain in the crown of his head, and ſtiffneſs, as uſual, behind the ear and down the neck: theſe complaints have continued till now, that they are going off; and have never prevented his ſleeping. He breaks a great deal of wind; makes much ſtraw-coloured urine, without ſediment; and has a natural ſtool every day.

Repeat the mixture, with ſeventy-five grains of the Extract, daily.

February

February 11. He continues to mend. Laſt night, he had more pain, than uſual, when in bed, and was too warm: but thoſe complaints ſoon went off. The ſtiffneſs behind his ear continues. His urine continues copious. He has a ſtool every day.

Repeat the mixture, with the addition of a dram of Magneſia.

February 13, after noon. On the eleventh, in the night, he was hot, and had much pain in the crown of his head: and his neck became full as ſtiff as ever. He was not hot laſt night: and he ſlept well. He is now much better, both as to the pain, and ſtiffneſs. The urine made on the morning of the eleventh, depoſed a copious ſediment; that made yeſterday morning, had but little ſediment, and of a white colour. This morning's urine continues quite clear, and without ſediment.

Repeat

Repeat the mixture, with two drams of the Polychreſt Salt, inſtead of the Magneſia.

February 15. He is much better ſince laſt report. Both his head and neck are, in a manner, quite free. The noiſe in his ear is much abated. He has never been hot; and has had very good nights. His urine is natural. His ſtools are regular. —He ſays, that he has never been ſo well, as he is now, ſince his illneſs began.

Let him take three large ſpoonfuls of the mixture every ſix hours

February 18. On the fifteenth, he had ſome pain of his head, and ſtiffneſs of his neck. The pain has affected him, at times, ever ſince; but now abates. On the ſixteenth, his urine was thick, and threw down a whitiſh ſediment. On the ſeventeenth, it was diaphanous, and without ſediment.

Divide

Divide half an ounce of the Extract of Hemlock, into forty-eight equal pills: and let him take three of them thrice a day, for two days; and then four, thrice a day, for a continuance.

February 25. On the eighteenth, in the night, he was much troubled with pain of his head; which went off in the morning. He had a good night, on the nineteenth. On the twentieth, in the night, he had a great deal of pain; which left him next morning. He has had very little of his disorder since; and that only at times. Both on the twenty-third, and yesterday in the morning, his water was rather high coloured, and let fall a copious sediment. His urine is not so copious.

Continue the pills.

March 3. He continued pretty well till the evening of the twenty-eighth; all which

which time his water was clear and without ſediment: but that night he was ſeized with pains through all his bones, chilneſs, heat, thirſt, and a violent return of the pain of his head, and ſtiffneſs of his neck, from cold; as he had been abroad, contrary to advice, for two or three days; and the weather was very cold. Next morning the pain went off, but returned again at night: it has continued ever ſince; but is hardly ſo bad as it was at firſt. He was rather hot laſt night. His breath is offenſive. His appetite is bad.

Let him take fifteen grains of Ipecacuanha, in powder, at ſix in the evening, for a vomit; and let him drink chamomile tea, to promote its operation.—Let him take an ounce and a half of the Sacred Tincture, at bed-time—Let him begin his pills again to-morrow morning.

March

March 8. The vomit operated gently, and brought up phlegm: and he has mended every day ſince. The pain of his head and the ſtiffneſs of his neck were ſo violent from the time that he catched the cold till he took the vomit, that he was confined to his bed, and moaned greatly. His urine was very high coloured during the feveriſh complaint, and depoſed a whitiſh, heavy ſediment, inclining to pink: it is now turbid, and whitiſh. His pulſe beats ninety ſtrokes in the minute: but, he ſays, that it was much quicker within theſe few days. He eats improper food, ſuch as bacon: and he is fondeſt of it; though, he ſays, that it lies very heavy at his ſtomach.

Diſſolve an ounce and a half of Polychreſt Salt, and as much ſugar, in a quart of ſpring water; and let him take four large ſpoonfuls of the ſolution every ſix hours, beginning immediately.

March

March 11. His head was worſe on the ninth, at night, than it had been the night before. Laſt night was a very good one: and he is much better to day. He has had two ſtools a day, ſince he began the ſolution. His urine is diaphanous, of a better colour, and more copious. His ſkin is temperate. His pulſe is calm.

Let him return to his pills, and take three, thrice a day, for two days; and afterwards four, thrice a day, for a continuance.

March 25. His complaints are gone.

Omit his pills.

His conſtitution was much improved by this courſe. He never had any return of his diſorder. About five years ago, he continued to enjoy a good ſtate of health, and went to live in a fenny country. After he had been there two years, he caught an ague; and was ſcarce recovered from it,

it, when he was ſeized with a pleuriſy, which proved fatal.

CASE. XXII.

A Scrofulous weakneſs of eyes cured.

Sarah Allen, of Derby, aged thirteen years, has been long ſubject to weak eyes, which nothing ever relieved but iſſues. They are ſeldom red now: but they are, generally, dim in the morning. The edges of the eyelids are ſtill reder than they ſhould be.--She has three hard, glandular, indolent, ſwellings under the left angle of the lower jaw; and one, in the middle, below the jaw, as far back as the larynx, to which it adheres, though looſely. The middlemoſt tumour, of the firſt three, is equal, in ſize, to the largeſt nutmeg. All the other tumours are each about half that ſize. The three ſwellings, firſt

firſt mentioned, make a conſiderable pro-minence, ſo as to disfigure her. All thoſe ſwellings began, about three years ago, without any known cauſe; and have gra-dually come to their preſent bulk. She is otherwiſe well. She is of a ſmall habit; and was born of a tender mother. Her father has had ſuch ſwellings.

Auguſt 16, 1775. Divide two drams of the Extract of hemlock into twenty-four equal pills: and let her take one of them every night and morning, for three days; and then let her take two pills twice a day, for a continuance.

Auguſt 28. She has taken the pills ſo, that they were only finiſhed yeſterday morning. All the ſwellings are leſs.

Let her continue to take two pills every night and morning.

September

September 4. The lumps are much diminiſhed.

Continue the ſame method.

September 10. The ſwellings are ſtill leſs.

Continue the pills.

September 16. The ſwellings continue to diſſolve. The edges of the eyelids are of quite the natural colour.

Continue the pills.

September 27. The ſwellings diſſolve ſlowly.

She is deſired to take three pills twice a day.

She only continued to take her medicine about eight days longer; as her eyes were quite well, and the ſwellings were much leſs than they had been.—She took, in all, fourteen drams of the Extract of Hemlock.

CASE XXIII.

A Scrofulous Ophthalmy.

Mrs. G. a widow, aged fifty-nine years, has been long ſubject to inflammatory affections of both her eyes: and, for theſe laſt four months, they have never been well. She complains much of heat, pain, and great weakneſs of her eyes, with inability to bear the light. The eyelids, as well as the eyeballs, are inflamed. The eyes diſcharge much water, and thick matter. They are generally worſt towards two or three in the morning: the pain is then ſometimes in one eye, and ſometimes in the other; but ofteneſt in the right eye; and ſhoots through to the back part of her head, and is ſo bad as not only to deprive her of ſleep, but to make her very reſtleſs.—She is, alſo, troubled with a particular diſorder, which, ſhe

ſhe thinks, alternates with the other: for, when her eyes are better, this is worſe; and, on the contrary, when this is better, the eyes are worſe. The diſorder begins in this manner. She awakes about one, two, or three in the morning, with a beating acroſs her breaſts, as though there were a thouſand hearts within her, and a rumbling of wind, attended with violent aching pain and great heat from about her navel, to the middle of her throat, giving the ſenſation as if ſomething ſtopped there; which makes her conſtantly ſwallow her ſpittle, as it were to clear the paſſage in her throat. The ſpittle, at this time, is very copious. The breaking of wind, in any way, gives her little or no relief. Her pulſe is always calm. Her appetite is good. A ſtool relieves her: but, if ſhe has many, ſhe is the worſe for them.

October 26, 1773. Let her take ten grains of the Extract of Hemlock, and as much Rhubarb, in the form of pills, at bed-time.

October 27. She slept from half an hour after ten, till four in the morning; and has had but a very small degree of her symptoms since. She has had two very slimy dark stools.

Repeat the pills at bed-time.

October 28. She slept none all night. She had her usual complaints in a small degree; though more than the morning before. She has had three or four small, dark, slimy, stools.

Let her take twelve grains of the Extract of Hemlock, eight of Rhubarb, and a drop of the oil of Cinamon, in the form of pills, at bed-time.

October 29. She had a good night, having ſlept above ſix hours; and has but little of her complaint. She has had two ſtools.

Continue the pills.

November 2. Let her take fourteen grains of the Extract of Hemlock, ſix of Rhubarb, and a drop of the Oil of Cinamon, mixed and formed into pills, at bed-time.—Let her take a tea-ſpoonful of equal parts of the Tincture of Myrrh, and the Stomachick Tincture, twice a day, to wit, in the morning, and at three in the afternoon, in a glaſs of water.

November 8. Her inward complaints are much better. The flutterings and heat are trifling. She has good nights. She has one ſtool a day.—

Continue the ſame method.

November

November 10. She ſlept none in the night. The wind rolled about a little, but with ſcarce any heat or pain. She has had three ſtools.

Continue the ſame courſe.

November 28. The inflammation, and pain of her eyes, are quite gone. The headach is alſo gone. Her inward complaints are, likewiſe, much milder than they have been: but ſtill they ſometimes occaſion ſleepleſs nights; and begin then about three in the morning. They are preceded by frequent eructations of wind, and a conſtant impulſe to ſwallowing.—She allows that ſhe has hurt her appetite, and digeſtion, by eating over eagerly, and of improper things, by exceeding in quantity, and by ſwallowing her food, before it was ſufficiently chewed, her teeth being bad. All this, ſhe allows, ſhe has ſometimes done, though not often;

ten; and that her nights have been the worſe for eating ſo improperly.

Continue the pills, and tincture.—— Spread ſome of the Plaſter of Hemlock, with Gum Ammoniac, on a large piece of leather, of a proper ſhape, and apply it to the region of the ſtomach.

The plaſter was once repeated. The pills were continued till the middle of April, with great benefit to her general health.

CASE XXIV.

An Ophthalmy and Albugo.

December 2, 1775. The ſame patient has been uſing hemlock, ſince the 26th day of Auguſt, for the diſorder in her eyes, which returned about ſix months ago. When ſhe began this medicine, both the eyeballs, and eyelids, were much affected with inflammation

flammation; ſhe had exceſſive pain, at times, in her eyes; they ran much water, and thick matter; and could not bear the light: there were alſo many offuſcations on the cornea lucida. She has taken three pills, twice a day, almoſt ever ſince ſhe began, and has ſcarce ever omitted them for a day: and ſhe continues to take them regularly. For more than two months her eyes have been quite free from inflammation, weakneſs, or diſcharge of any kind: and the offuſcations, all this time, have been gradually wearing off. Her eyelids are paler, and freer from redneſs, than they ever uſed to be, when ſhe was in her beſt health. Her head is much better; though ſhe has frequently pain in the back part of it ſtill. Her health, in general, is alſo much better than uſual, ſince ſhe began the pills. She ſtill complains of her nights. She is naturally a bad ſleeper. Her appetite is good. Her pulſe is calm. Her belly is natural.

She has a ſeton in her neck, which runs pretty well. It was put in a conſiderable time before ſhe began the hemlock, and did not ſeem to produce any effect.

She has frequently uſed leeches to her temples, within theſe laſt ſix months; but they only gave a little relief for a day or two, till ſhe began the hemlock.

CASE XXV.

An Opthalmy and Albugo.

The ſame patient left off her pills about the beginning of May, and ſhe continued well till ſix weeks ago, that her eyes began to inflame: and they have continued bad, and have indeed been getting worſe ever ſince. They are now as bad as they ever have been. The eyelids, and eyeballs, are inflamed, and freſh offuſcations have come upon her eyes, particularly

ly a very large ſpeck on the left cornea, which hurts the eyelids much in the motions of the eye. Her eyes water much; and alſo diſcharge a great deal of thick matter, eſpecially in the morning. She has much heat and pain in her eyes: and they cannot bear the light. She ſays, that ſhe ſees very little. Frequent heats come into her temples, and cheeks, near to the eyes. She is often chilly, and ſometimes hot. Her pulſe is quick and low. Her health, at preſent, is tolerable; except that ſhe is troubled, as formerly, in the night, with frequent propenſities to ſwallow, and with the fluttering in her bowels.

She has uſed leeches very often; but does not think that they have done her any good. She was alſo bled at the ancle, without benefit. For ſome time ſhe has been taking fifteen grains of the Extract of Hemlock, twice a day; and has been anointing the edges of the eyelids, every night, with a little of a ſalve, compoſed of equal

equal parts of the Ointments of Lead and Tutty, and loaf ſugar.

November 8, 1776. Continue the eye-ſalve. Let her take four five-grain pills of the Extract of Hemlock, every night and morning; and, with each doſe of the pills, two large ſpoonfuls of the following mixture. It contains ſeven ounces and a half of the Simple Alexeterial Water, half an ounce of the Syrup of Orange-peel, an ounce of proof ſpirit, and a dram and a half of the Polychreſt Salt.—Alſo, let her take thirty drops of the Acid Elixir of Vitriol, in a glaſs of water, every fore-noon and afternoon.

November 13. Her belly was looſe with gripes yeſterday. The fluttering was very troubleſome laſt night. Her eyes are leſs inflamed; but ſtill water much.

Omit the elixir. Continue the mixture twice a day. Continue the ointment.

—Let

—Let her take three pills thrice a day; to wit, in the morning, at noon, and at night.

November 15. He reyes are lefs inflamed: and the pain of them is much abated. Her cheeks are not fo flufhed. She is much diftreffed with the fluttering in her bowels, efpecially in the night. Her pulfe is calm. Her belly is rather loofe. She takes only four pills thrice a day.

Continue the fame courfe.

November 17. Her eyes continue better. Her nights are fleeplefs: and fhe complains of the fluttering, and fuch exceffive lownefs, that, fhe thinks, fhe cannot live. Her pulfe is calm and low.

Omit the Saline Mixture.—Continue the ointment.—Let her take two pills, thrice a day; and with each dofe, two large fpoonfuls of the following mixture; which contains half a pint of the Simple Mint

Mint Water, an ounce of the Tincture, and three drams of the Extract, of the Peruvian Bark.

November 18, at noon. She is better in every reſpect: but ſhe ſlept none laſt night. She took her medicines twice yeſterday, and twice to day, as ordered. She takes boiled wheat and milk to her ſupper, becauſe it keeps her open. She is deſired to abſtain from it.

Continue the ſame method.

November 21. She has better nights; and has leſs of the fluttering. Her eyes continue much freer from inflammation: and they diſcharge leſs. As ſhe complained, yeſterday, of pain in her left eye, two leeches were applied to the left temple: and as the pain, though leſs, continues, a ſmall bliſter is to be applied behind the left ear at night. — She takes the mixture only twice a day, at night, and in the morning.

She

She takes two pills every night and morning, and three at noon.

Continue the ſame courſe. Repeat the mixture, with the addition of a dram of the Extract of Hemlock.

November 25. The inflammation is greatly abated; and the ſpeck is much leſs: but ſhe ſees no better as yet. ſhe ſleeps better, though ſtill badly: and the flutterings, and ſwallowings, continue troubleſome. She has a ſtool every day. —She takes eight pills, and four ſpoonfuls of the mixture, in the day. The iſſue runs well. The bliſter has never been removed ſince it was applied, and now begins to dry up.

Continue the ſame method. Take of Sagapenum a dram, powder of wild Valerian Root half a dram, and make them into a maſs, with ſyrup, to be divided into twenty pills. Four of theſe Laxative Pills are to be taken every night at bed-time.

November

November 29. Her eyes continue to mend. Her other complaints continue the ſame. She has not taken any of the Laxative Pills.

Continue the ſame courſe.

December 3. The inflammation of the eyeballs is quite gone. The edges of the eyelids continue red. The diſcharge from the eyes is greatly leſs. She has taken one doſe of the Laxative Pills: and they purged her. The ſwallowings, and flutterings, are very bad in the night; and begin as ſoon as ſhe lies down.

Let her take two of the hemlock pills, thrice every day; and two ſpoonfuls of the mixture, with each doſe.—Let her take two of the Laxative Pills at night; and drink Valerian-tea occaſionally.

December 7. The ſpeck is now very trifling. The inflammation, both of the eyeballs, and eyelids, is quite gone. The

nervous

nervous complaints continue troublesome: but she looks well; and her pulse is calm, firm, and regular.

She had afterwards returns of all her complaints: and they always yielded to the means employed. The hemlock continued to answer better than any thing else for her eyes; and, indeed, always proved a cure.

As I imputed the general bad state of her health, to the low and damp situation of her house, she changed it for a more dry, and airy habitation, and with manifest good effect; for she then enjoyed a much better state of health, and her eyes continued well, as long as I knew her. I am, however, informed, that her eyes are not well now; and that she is using empirical applications, with little or no advantage.

SECT.

SECT. III.

CASES REFERRED TO IN THIS WORK, WHICH ARE NOT REDUCIBLE TO EITHER OF THE FOREGOING SECTIONS.

CASE XXVI.

A Quotidian Hemicrany cured, chiefly, by Laxatives and Opium.

THOMAS SUTTON, of Derby, aged thirty years, by trade a joiner, was ſeized, yeſterday about eight in the morning, with violent pain in his forehead, a little higher than the right frontal ſinus, attended with chillineſs all over him, and ſickneſs. Theſe complaints laſted for ſeveral hours: and the right eye watered very much, and he could not open it. He remained, afterwards free from the pain, till this morning, at nine, when the ſame

complaints returned with violence, and continued till one o'clock. He is now pretty well, and can open his eyes, which do not ſeem, in the leaſt, affected. He was bled yeſterday in the evening, and, afterwards, got a vomit, which brought up a great deal of phlegm. He took a bolus of Rhubarb and Calomel, at bed-time, which has given him but two ſtools as yet. He was troubled with headach, violent cough, and other ſymptoms, about three weeks ago, from cold: but, he had been above a week well, when his preſent complaints began. He has, formerly, had agues three different times. The firſt happened when he was very young, and was removed with difficulty.

June 3, eleven in the forenoon. He reſted very well laſt night. He has had three more ſtools from the bolus. The pain, and other ſymptoms, returned this morning at eight, and have been more violent

violent than ever; but now begin to abate a little. He ſays, the pain affects the ſame place, and moves to and fro like the pendulum of a clock. When the clock ſtrikes, which is in the ſame room with him, it diſtracts his head. His eye waters now very much: and he is obliged to keep it ſhut. When the pain abates, he grows warm. His pulſe beats about eighty ſtrokes in the minute.

Apply a large bliſter, between his ſhoulders, in the evening: and give him fifteen grains of the Aloetick Pills, at bed-time.

June 4. He had a ſlight fit to day; which came on about the uſual time. He has had no ſtool.

Let him have a ſcruple of the ſame pills at bed time,

June 5. He has had a good night. He has had the ſame kind of pain, all yeſterday and to day, in his forehead, but

in a very ſlight degree. The pain never paſſes beyond the right ſide of his forehead. He has had five ſtools ſince early in the morning.

Let him take fifteen grains of the Aloetick Pills, and a grain of Opium, at bed-time.

June 6. He has had a very good night; and has no complaint to day. He had two more ſtools yeſterday; and none ſince.

Let him take twenty grains of the Aloetick Pills, and a grain of Opium, at bed-time.

June 8. He continues free from complaints.

This man, ſo far as I know, never had any return of this diſorder.

CASE

CASE XXVII.

A Phrenitis cured by purging.

JOHN SEXTON, a boatman, of Sawley, in Derbyſhire, a middle aged perſon, had been ill for more than a week, when I was called to him. He had, in general, during this time been delirious, and often furious; and was then kept in bed by force. He had once ſallied forth from his family, and was taken drinking at an ale-houſe in the village. I found him in bed. He was quite delirious. His eyes were ſtaring and red. His pulſe was quick. His ſkin was hot and dry. In his intervals he complained much of headach. In his raving fits, he ſaid, he was not in his own houſe, that there were lice upon the bed, that he would not ſtay there, and offered violence to the people about him. His urine was high coloured

coloured, and without any tendency to ſeparation.

Auguſt 13, 1776. Let him have broth, gruel, and barley water, by turns, for all his food. Let him take three large ſpoonfuls of the following mixture every four hours, beginning as ſoon as it can be got. It contains ſixteen ounces of the Simple Alexeterial Water, four ounces of the Camphorated Julep, an ounce of the Common Manna, and half an ounce of Nitre.

Auguſt 15. I viſited the patient again this day. He became quiet from the moment that he began with the mixture; which was in the evening: he has ſlept and dozed ever ſince, has had a ſtool almoſt every hour, during the uſe of it, and has made plenty of urine. The mixture was finiſhed this morning at five: and he had his laſt ſtool at ſeven. His delirium is quite gone.

His

His ſkin is temperate, and moiſt. His pulſe is calm. His urine is of a light orange colour, but ſtill without any marks of ſeparation. He only complained of ſome pain in his head, and of ſoreneſs all over him. He has ſome appetite: but the leaſt thing ſatisfies it.

He is adviſed to continue the ſame method; and to take the medicine in leſs quantity, ſo as to keep the body gently open.

Auguſt 17. I am informed, to day, that he continues to mend; and that he makes plenty of urine, which is pale, and depoſes a whitiſh ſediment.

CASE XXVIII.

A Laryngeal Quinſey cured.

Mr. JOHN RADFORD, of Holbrooke, in Derbyſhire, of a thin habit, rather advanced

advanced in years, and ſubject, a great part of his life, to flatulent colicks; after ſtanding, for a conſiderable time, over his workmen in a cold evening, in December, ſeventy-four, was ſeized with a ſhivering fit, which was ſucceeded by great heat and thirſt. In three hours, the hot fit was accompanied with pain at the top of his wind-pipe, and great difficulty both in breathing and ſwallowing. Theſe ſymptoms grew hourly worſe. I ſaw him on the third night, at midnight. His breathing was hiſſing, and very difficult; his voice was gone; and he could not ſwallow any thing; for an attempt to ſwallow even a tea-ſpoonful of the mildeſt liquor, was ſo very painful to him, and ſo much phlegm was thrown up by the cough, which was excited by thoſe efforts, that it was to be doubted, whether the leaſt drop ever found a paſſage into the ſtomach. The phlegm, which he brought up on thoſe occaſions, was, for the

the moſt part, pure and unmixed; though, now and then, dark ſtreaks were obſerved in it. He never coughed at any other time. His face had a ſunk, ghaſtly, appearance. His ſkin was hot and dry. His pulſe was very quick and low. He was thirſty. He had ſome appetite. His urine was high coloured, and quickly became turbid, as though impregnated with brick-duſt.—A bliſter was at his back, which had been applied at noon: and, by means of it, they ſaid, his breathing was even freer than it had been. He could now open his mouth, ſo that a view could be got, though with much difficulty, of his throat internally; for, before, his jaws were quite locked. Nothing, however, could be perceived in the throat. His tongue was moiſt and white. There was no external ſwelling: but the right ſide of the larynx was very painful to the touch.

December

December 25, in the night. Let a bliſter be applyed to the right ſide of the larynx: and let it remain thirty-ſix hours.—Let him breath over the ſteams of hot water, for ten minutes, every three hours.—Let him have a clyſter of ſalt and water immediately. And, after its operation, let the following ſolution be given in three quarters of a pint of weak broth, by way of clyſter, to be retained; and to be repeated every three hours. The ſolution contains a dram of Nitre, in two ounces of ſpring water.

December 26, in the afternoon. All his ſymptoms are relieved. He can now ſwallow liquids, though with difficulty and pain. His pulſe is firmer, and not ſo quick. His urine is copious, and of a better colour. He complains of being very low. The clyſters have ſometimes come away.

Let

Let the clyſters be continued, with the addition of four drops of Laudanum to each.

Let him take, when low, a large ſpoonful of the following mixture; which contains ſeven ounces of the Simple Alexeterial Water, one ounce of the Simple Syrup and half a dram of the Volatile Salt of Hartſhorn.

December 27. He has had a pretty good night. He continues to mend. He ſwallows freely.

Omit the clyſters.—Let him take, every four hours, a draught, which contains two ounces of ſpring water, half an ounce of the Simple Syrup, and half a dram of pure Nitre.—Let him have weak broth, gruel, and barley water, by turns, for all his food.

December 28. All his complaints are greatly abated. He is much troubled with wind.

Let

Let him take a ſpoonful of the mixture, when troubled with wind.—Let him take, every ſix hours, the following draught; which contains an ounce and a half of the Simple Alexeterial Water, half an ounce of the Camphorated Julep, two drams of the Syrup of Orange-peel, and twenty five grains of Nitre.

December 29. He has good nights. He has no pain, or difficulty, either in breathing, or ſwallowing. His ſpirits are better. His ſkin is temperate. His pulſe is calm. His urine is copious, of a good colour, and without contents. He has a ſtool daily.

Let him continue the draughts, with only a ſcruple of Nitre in each.

December 30. He is rather coſtive.

Continue the draughts, with the addition of ten grains of the Polychreſt Salt to each.

January

January 1, 1775. He has had no ſtool theſe two days.

Repeat the clyſter of ſalt and water.—Continue the draughts, with a ſcruple of the Polychreſt Salt in each.

After this Mr. Radford recovered fleſh and ſtrength faſt; and enjoyed a better ſtate of health than he had done for years before. And, if I am rightly informed, he has continued healthy and well ever ſince.

Though the following caſe was unſucceſsfully treated; yet I cannot help allowing it a place here, for reaſons that ſhall be given in the next chapter.

CASE XXIX.

A Laryngeal Quinſey.

March 15, at night, 1780. Mrs. Jackſon, of Scrafton, in Derbyſhire, a widow, and middle

middle aged, was ſeized on the 13th in the evening, with pain, and difficulty, both in ſwallowing and breathing; which complaints have been increaſing ever ſince. This diſorder was preceded by a chillineſs, which was ſucceeded by heat: and, yeſterday, ſhe was cold and hot, by turns, moſt of the day; but ſo as never to be rightly warm. At preſent, her jaws are ſo locked, that it is with difficulty that the ſtate of her throat can be ſeen internally. The right tonſil is a little ſwelled; but nothing more can be perceived amiſs, all the other parts having a natural appearance. Her throat being ſyringed with a mild liquor, at my deſire, a good deal of clear ſlime comes away. Her breathing is painful, difficult and hiſſing. She has hardly any voice. She can ſwallow very little, and that with great pain. Even the bare attempt toward ſwallowing gives her much pain. She calls the pain, a throbbing pain. The region of the right tonſil is painful

to

to the touch, and a little ſwelled. The whole courſe of the larynx, and the contiguous parts of the neck, are alſo painful to the touch. Her tongue is moiſt and white. She has no cough. Her ſkin is temperate: but ſhe ſits out of bed in her clothes. She ſays that ſhe is hot in bed: but ſhe dreads going to bed, becauſe a recumbent poſture increaſes her difficulty of breathing. Her pulſe is rather low, and beats a hundred and twenty ſtrokes in the minute. She has had no ſleep ever ſince ſhe was taken with this diſorder. She has neither appetite nor thirſt. Some urine made within theſe few hours, became ſoon of a milky colour, and continues ſo. She has, in general, been ſtrong and healthy.

Laſt night ſhe had a draught of Soluble Tartar and Tamarinds; which gave her four ſtools, and made her very low without relieving her diſorder.—She has been uſing fumigations of Myrrh and Camphor, and has been ſyringing her throat with a liquor

of

of the ſame nature.—She laboured under a common inflammatory quinſey about two months ago.

Much the ſame method was recommended as in the preceding caſe.

March 16. I am informed that the pain left her in the morning, and that ſhe could ſwallow much better, and thought herſelf better: but ſhe ſoon after appeared, in every reſpect, worſe; and died between three and four in the afternoon.

CHAP.

CHAP. III.

MEDICAL OBSERVATIONS.

ARTERIOTOMY is of very great antiquity: for we can trace it as far back as we have any records of medicine. I have no intention, however, at preſent, to give a general hiſtory of this ſubject. I mean, only, to conſider the medical effects of that operation, which has been minutely deſcribed in ſome of the preceding pages. With this view, I have given a number of caſes to the publick, as ſo many inconteſtable proofs of its efficacy, either as a radical, or as a palliative, cure, ſuperior to any other means that had been tried for ſeveral obſtinate diſeaſes of the head. I ſhall make a few remarks on each of thoſe diſeaſes; and conclude with recommending the ſame practice in ſome other diſorders of the head, comprehend-

ing the neck, according to the most common anatomical diviſion of the human body.

SECT. I.

OF THE HEADACH.

Headach is an appellation of great latitude, comprehending diſeaſes of very different natures. The caſes, above recorded, afford ſome variety of this diſorder. The ſecond, and tenth, caſes were both, in my opinion, of a gouty nature; for each of thoſe patients had ſhifting pains in different parts of their body after the headach was removed. And one of them was affected with the ſtrangury, which has juſtly been conſidered by the late Doctor David Clerk as a ſymptom of the anomalous gout *.

* Eſſays and Obſervations Phyſical and Literary, p. 442.

The

The thirteenth caſe happens very ſeldom in this country, being in a manner peculiar to warmer climates. It is, in general, conſidered as an inflammatory diſeaſe, and of very dangerous tendency. Our caſe ſeems to have depended, almoſt entirely, on pure membranous irritation. And it is curious to obſerve, how this irritation was firſt impreſſed, by the ſcorching rays of the ſun, on the membranes of the brain; and thence communicated to the other membranes of the body, as of the firſt paſſages, the urinary organs, and the whole vaſcular ſyſtem, occaſioning ſymptoms peculiar to all the parts affected. In fact, this caſe, properly conſidered, is only a fever from heat. That cold acts moſt certainly as a febrile cauſe when applied to a particular part of the body, is now generally acknowledged. And the caſe under conſideration is a demonſtration of the ſame effect from a topical application of heat. Thus two cauſes, heat and cold, in

their own natures the moſt oppoſite to one another, produce a diſeaſe of perfectly the ſame nature, to wit, fever; and produce it too, in the ſame manner, by a partial application. The ſixth caſe is a fever from cold. In both thoſe caſes, arteriotomy was of the greateſt ſervice for the headach.

The ſeventeenth caſe was certainly rheumatick; for the lady had been afflicted with the rheumatiſm, for ſeveral years before, attended with a quick pulſe, and ſizy blood.

Such headachs as accompany the ophthalmy in general are owing to a ſympathetick irritation. This is evident in the fourth, eighth, and fourteenth caſes. And this ſympathetick affection may at laſt become inflammatory: an inſtance of which we have in the fifth caſe. Or, both the head and eyes may be affected in the ſame manner from a common cauſe, as in the

the eighteenth caſe. Or the headach may, comparatively ſpeaking, be the primary diſorder; and ſo affect the eyes in the different ways mentioned, as in the ninth, tenth, and twelfth caſes.

SECT. II.

Of the Hemicrany.

What has been ſaid of the headach, in general, is alſo applicable to the hemicrany: for it admits of the ſame latitude as to its nature. Beſide, the hemicrany is more commonly diviſible into continual and intermittent. The proximate cauſe of the continual hemicrany is, ſometimes, ſeated within the head. Of this, the fifth caſe is an example. The proximate cauſe of the intermittent hemicrany is never within the head. The pain, in this caſe, depends on pure membranous irritation, ariſing from

ſympathy.

ſympathy with the proximate cauſe, which is lodged in the inteſtines. This diſeaſe, however, may, through bad treatment, be brought to the nature of a continual hemicrany, as in the eighteenth caſe. I have no reaſon to doubt that it was, at firſt, of an intermittent nature: but, through over indulgence, it was not only never ſuffered to intermit; but what was, at firſt, only a ſimple nervous irritation, was, by the ſame means, aggravated into an inflammatory affection; which, having thus become the principal diſorder, I have conſidered it accordingly as a continual hemicrany. This inflammatory congeſtion was, probably, the cauſe of the watery effuſion within the head, by impeding the action of the abſorbents. And the opening of the Temporal Artery reſtored the abſorption, by removing the inflammation. In whatever way the effects of arteriotomy were produced in this caſe, they were extraordinary; for the eye was reſtored to its natural

tural ſize, and every morbid ſymptom was removed, except the amauroſis. Indeed, could the patient have obſerved rules, there were even hopes that he might have obtained a complete cure.

From what has been ſaid, it is evident that, the continual hemicrany is often a dangerous diſeaſe; though, when timely aſſiſtance is given, it is, for the moſt part, curable. Although the intermittent hemicrany be, from its own nature, never dangerous, and, although, there be an acknowledged analogy between it and intermittent fevers; yet, few diſorders have given more trouble to the phyſician than this. It has, indeed, generally been found very difficult of cure. The Peruvian Bark, ſo far as I have obſerved, does hurt in this caſe. I have ſucceeded with Laxâtives and Opium: of which the 26th caſe is an inſtance. And I have, formerly, recommended this method for the intermitting oph-

thalmy *. But, as I had cured agues with hemlock, and even after the Bark had failed, it was natural for me to try this medicine in the intermitting hemicrany: and, from experience, I can hitherto ſay, that it always cures the diſeaſe; and alſo renders the patient's general health better, perhaps, than it had been for long before. The nineteenth, and twenty-firſt, caſes are given as proofs of the efficacy of hemlock in this diſeaſe.

SECT. III.

Of the Phrenitis.

The ſixteenth caſe may juſtly be called an incipient phrenitis. In the phrenitis, arteriotomy is preferable to any other mode of drawing blood. But, when the patient is reſtleſs and intractable, as is generally

* A Treatiſe on the Kink Cough. p. 27, &c.

the

the caſe, blood-letting, of any ſort, is attended with inconvenience. And, indeed, from what I have ſeen, I am induced to believe, that cooling and diluting means, which, at the ſame time, move powerfully by urine and ſtool, and, as much as poſſible without exciting irritation, make, at all times, a principal part of the cure; and act ſo effectually as, in many caſes, to render bleeding unneceſſary. Of this we have an example in the twenty-ſeventh caſe.

SECT. IV.

OF THE OPHTHALMY.

This diſorder occurs, like any other inflammation, either with, or without, fever. And though this laſt be ofteneſt the caſe; yet, the diſtinction ought always to be kept in view, as it much affects practice. When

When the ophthalmy is accompanied with fever, you muſt principally attend to the latter, as being the cauſe of the former. You ſhould, therefore, draw blood according to the urgency of the local diſorder. If the inflammation be great, open the Temporal Artery, as being the moſt effectual palliative. If it is moderate, bleeding at the arm, and moderate bleeding too, will be ſufficient. But the principal means of cure muſt be thoſe which take off febrile irritation; ſuch as cooling, diluting, laxative, and diuretick medicines, daily perſiſted in, till the fever either ceaſes entirely, or intermits. In this laſt caſe, the Peruvian Bark muſt be given to carry off the fever: and it will, generally, cure the ophthalmy at the ſame time. If the ophthalmy ſhould, notwithſtanding, continue; then draw blood from the Temporal Artery, which will, almoſt to a certainty, quickly remove it: and a continuance of the Bark will prevent its return.

When the ophthalmy is not attended with fever, you ſhould immediately have recourſe to the opening of the Temporal Artery, as being the moſt certain, and the moſt ſpeedy means of cure yet known. If the inflammation does not depend on ſome conſtitutional defect, the cure will be radical. If otherwiſe, as in the caſes of ſcrofula, obſtructed menſes, or the like, though the cure will not be complete; yet, if the diſorder be very acute, arteriotomy is the moſt ſpeedy, and the moſt effectual palliative.

As to external means; they muſt vary according to circumſtances. The keeping of the eyes cool, and the excluſion of light, are, in every caſe of ophthalmy, indiſpenſably neceſſary; and will often ſuperſede all other topical applications. I am able to teſtify, that two or three drops of Laudanum, as recommended by Meſſ.

Wathen

Wathen and Ware, is one of the beſt topical remedies for inflamed eyes *.

SECT. V.

Of the Albugo.

The word Leucoma is adopted, by Noſologiſts, as the generical name of this diſeaſe. And the ſpecies that occurs ſo often in the foregoing caſes, and of which only I mean to treat, is called Albugo. I beg leave to adopt this word, for the English ſpecifick name alſo; becauſe our language does not afford a proper one. Even our generical name is a circumlocution: for ſpeck, ſpot, or offuſcation, are not rightly underſtood, till the name of the part affected is added. This diſorder occurs ſo often in the foregoing caſes, that it is neceſſary to ſay ſomething of it here. In all the caſes of the ophthalmy, where

* Remarks on the Ophthalmy &c. p. 29.

the Mercurial Laxative Pills were uſed, it was chiefly on account of the Albugo. And it is obſervable, that thoſe pills were of the greateſt ſervice for this diſorder. But it is likewiſe evident, that the cure of the inflammation was thereby retarded, frequent relapſes of it having occurred, which could be imputed to nothing elſe, but to the patient's being more liable to catch cold, from the uſe of the mercury. It is with peculiar ſatisfaction, therefore, that I can recommend, from experience, a more powerful remedy, even than mercury, for the Albugo; and which, at the ſame time, is free from its inconveniencies. I mean the Extract of Hemlock; which I have uſed often in this caſe. I have alſo found it an excellent remedy for the ſcrofulous ophthalmy. And as both thoſe diſorders yield, with great difficulty, to all other means hitherto tried, I have thought it right to ſhew the great efficacy of the Hemlock in each, by giving ſuch

ſpecimens

ſpecimens as are to be found in the third ſection of the laſt chapter.

SECT. VI.

Of the Amaurosis.

The ninth caſe exhibits ſuch a ſplended effect of arteriotomy, in the Amauroſis, that, I flatter myſelf, for the future, in no inſtance will this deplorable, and too often incurable, diſeaſe, be abandoned, till this, among other powerful remedies, hath had a full trial. We have proved the efficacy of this operation to be ſovereign for the removal of inflammation. In the ninth caſe, it ſeems to have carried off the diſeaſe by freeing the optick nerve from compreſſion, probably, the effect of a ſlow congeſtion in the contiguous arterious ramifications. In the eighteenth caſe, it operated in the ſame manner, of removing

removing congeſtion in the blood veſſels, which was the cauſe of the watery effuſion, by impeding the action of the abſorbents. This leads us to extend the uſe of arteriotomy to the removal of ſome other diſeaſes, as the dropſy of the head.

SECT. VII.

OF THE APOPLEXY.

I once ordered the temporal artery to be opened for a man labouring under the apoplexy, at Wirkſworth. He was a workman of ſome ſort in Mr. Hurt's ſervice: and the late Mr. Mellor was the ſurgeon. The artery bled very briſkly: but after a good deal of blood had been loſt, without any apparent good effect, I choſe to deſiſt; leſt I ſhould have been thought to take away that life, which it had not been

in my power to ſave*: for I was taught to believe, that blood-letting, if not uſeful, is not innocent in the apoplexy †. However, I am ſtill of opinion, that, in ſuch caſes, arteriotomy ought to have a full trial; but with every precaution neceſſary for the reputation of the phyſician, and ſatisfaction of the patient's friend.

SECT. VIII.

OF THE ANGINA, OR QUINSEY.

I have never tried the opening of the temporal artery in any ſpecies of the

* Ne occidiſſe, niſi ſervaſſet, videretur. Vid. Celſum in Praefat.

† Van Swieten. Commentar. Vol. iii. §. 1029.

Quinſey:

quinſey: but I formerly recommended it for the common inflammatory quinſey*; and, likewiſe, for that ſpecies of the diſeaſe which is uſually called the Croup‖. As the common inflammatory quinſey very often occurs; and, when it has once happened, is very apt to return: beſide, as it is very difficultly hindered from coming to ſuppuration, except when taken at the very beginning; and when it has once ſuppurated, it is ſtill more difficult, in all future relapſes, to prevent the ſame conſequence; I would adviſe the uſe of arteriotomy, as a remedy, that bids fair for removing ſuch an inflammation more ſpeedily, and more effectually, than any of the means that have yet been tried.

I think that this operation ought to be practiſed in every other ſpecies of

* Diſſert. de Arteriotomia, p. 36. ‖ Ibid. p. 37.

purely inflammatory quinsey: and its use becomes indispensable, in proportion to the danger, or acuteness of the case. In particular, we ought to have recourse to it immediately, when called in cases affecting the top of the gullet, or wind-pipe, especially the latter. Though I cannot easily conceive, how an inflammation can exist in either of those parts, without both, to appearance, being equally affected, at least, from sympathy. The two last cases in this work, are instances of the inflammation of the top of the wind-pipe: and I have published them, because it is a disorder seldom met with in practice, and because our accounts of it, in books, are very imperfect.

CHAP.

CHAP. IV.

STRICTURES
ON THE USUAL
OPERATIONS FOR THE CATARACT;
AND A NEW ONE PROPOSED.

THE frequent difficulty in depreſſing a Cataract, and its being very apt to riſe again, are two ſuch capital objections to couching, that a new method of operating hath, perhaps, with great reaſon, been attempted. I muſt not, however, omit taking notice, that as we cannot be certain, that thoſe Cataracts were thoroughly depreſſed, which afterwards roſe again, ſo it might be worth while to aſcertain this, by couching with a needle having a much broader point than has been

yet uſed. Such a large ſurface, being applied to any Cataract, could ſcarce fail of puſhing it effectually down; where, in all probability, it would continue for a conſiderable time; even till the ruptured cells of the vitreous humour were reunited, when its aſcent would become impoſſible. For, the event of couching is rendered precarious, not only on account of the ſmall ſurface of the needle commonly employed, but alſo by reaſon of the reſiſtance from the vitreous humour: for, though that part of the Cataract, on which the needle reſts, quickly makes its way; yet, the ſides of it, eſpecially if ſoft, are neceſſarily puſhed upwards, and having never been applied to the bottom of the eye, the whole is kept ſuſpended, and ſoon returns again to its former place. Whereas, if the Cataract be compleatly depreſſed upon its largeſt ſurface, hydroſtatical experiments would induce us to expect the conſequence which

which we have juſt now mentioned. This, to be ſure, is obvious to every perſon: and I can ſee no reaſon why it was not practiſed long ago, unleſs from an apprehenſion of bad effects from cutting into the ball of the eye, which later experience ſhews to have been ill-founded.

Couching is ſo neat and ſimple an operation, that every humane perſon muſt be intereſted for its ſucceſs. And, indeed, at any rate, the method of extraction, hitherto practiſed, does not appear to be a remarkable improvement; ſeeing its inconveniencies are not only more numerous, but alſo often productive of worſe conſequences.

For, firſt, in running the knife through the cornea lucida, ſo very near the Iris, it is ſometimes ſcarce poſſible to ſhun it, on account of the quick involuntary motions of the eye.

Secondly,

Secondly, ſuppoſing the operator has kept clear of the Iris; yet, this being a muſcular part, it is brought, by the pain, into violent contractions, at the very time when the cataract is forced through it, which muſt diſtract and tear it; and the more, as even at its greateſt natural dilatation, it is not fit to tranſmit ſo large a body, as the cryſtalline lens. That ſuch a laceration always takes place, I have no reaſon to doubt; ſince, in all the caſes that I remember to have ſeen, the pupil was wide, unequal, and immovable, after the operation. It is no wonder, therefore, that a ſmart inflammation ſhould be the general conſequence of this operation.

Thirdly, as the capſules of the cryſtalline, and vitreous humours, are one continued membrane, the adheſion, on that account, is ſo great, that, generally, the lens cannot be forced out, even by preſſure upon the eye, without previouſly

wonnding

wounding the capſule: by which means, this membrane is left behind. Now, the diſeaſe is often in the capſule, as well as in the lens: and, therefore, when the former is left behind, matters are much as they were; for it hangs, like a curtain, before the ſight, and, unleſs at the particular part where it has been torn, the patient ſees no better than before. Of this I have ſeen more inſtances than one.

Fourthly, in ſpite of every precaution, offuſcations will be produced on the cornea lucida; which, though, at firſt, not oppoſite to the pupil, will, in ſome habits, ſpread ſo as to intercept the ſight.

Finally, ſuppoſing all thoſe inconveniencies, and others too, which could be mentioned, may, now and then, be ſhunned; yet, that can only happen under the hands of a Daviel, a perſon very much converſant in the practice of this operation:

tion: this objection is of great moment; since any thing, that promises much utility to mankind, ought, if possible, to be rendered easy and practicable, that it may be dispersed into many hands.

From what has been said, it appears, that though the most certain means of getting rid of a cataract is by extraction; yet, that operation, as hitherto practised, is liable to so many inconveniencies, and requires such a nice observance of circumstances, that it is scarce probable it will ever become general.

This gives every person a title to propose whatever seems most likely to succeed: nay, it is their duty so to do. I shall, therefore, without any apology, describe the method which I would recommend, being the result of a number of trials made on dead bodies.

§ 1. The patient being conveniently ſeated, as uſual, an aſſiſtant is to keep the palpebræ wide open, by taking hold of the eyelaſhes.

§ 2. The operator, having made the patient look towards his noſe, inſtantly puſhes the cutting forceps into the albuginea, at the diſtance of about one fourth of an inch from the cornea lucida, and in a plane parallel to that of the iris.

§ 3. The lancet being introduced as far as it will go, he allows the forceps to open a very little, that the lancet may fly back; and then preſſes the toes of the forceps together, as before, and introduces them between the Iris and Cataract, into the aqueous chamber.

§ 4. Having thus got a view of the forceps, he draws it gently back again, till its point touches the external edge of the cataract:

cataract: and then allowing it to open sufficiently,

§ 5. He pushes his instrument cautiously forwards, till he sees that the external leg of it has got over the cataract: he then takes a very gentle hold of it, and extracts it.

The assistant can, very easily, keep the eyelids asunder, without incommoding the surgeon, by taking hold of the eyelashes as directed (§ 1.): and this is also the firmest gripe, and easiest for the patient.—When those hairs are wanting, it will be necessary to keep the eyelids open, by pressing the upper one against the brow, and the lower against the cheek-bone, a fold of linen being placed between them, and the assistant's finger, to prevent their sliding, by the watering of the eye. However, in this case, perhaps, the operator may

may find it more convenient to keep down the lower eyelid himſelf.

The operator needs not be very anxious with regard to the place where he makes his opening. It is intended, that the knife ſhould not be puſhed in directly upon the cataract; becauſe that might tear, or diſlodge it, which would render the extraction more difficult. But, ſuppoſe the knife was put in oppoſite to the cataract; yet, the operator may keep clear of it, by directing the point of his knife a little inwardly, towards the bottom of the eye. On this account, he ought not to heſitate long before he makes his inciſion (§ 2.): for, by ſo doing, he will both fatigue himſelf, and the patient, without any neceſſity; and render the event of the operation more precarious, by ſpoiling the ſteadineſs of his hand.

As we cannot know but the Cataract may be ſoft, it will always be prudent to take a very ſlight hold of it. And much preſſure is the leſs neceſſary, as the legs of the forceps are ſcabrous internally. But if, either from extreme ſoftneſs, or increaſed bulk, the extraction by the forceps ſhould be leſs convenient, it may be effected in this manner.—Having introduced the forceps into the eye, as above directed (§ 2.), in order to keep that organ ſtable, and the wound diſtended, extract the Cataract between its legs, by means of a hook, or rather a ſmall ſcoop.

When the Cataract adheres to the Iris, a caſe hitherto deemed incurable, you are to ſeparate it by the forceps, before you attempt to extract, or take hold of it.

This Poſterior Method ſeems to require leſs nicety in the performance, than

even bleeding at the arm; an operation ſo common, that every gardener takes upon him to perform it, and generally performs it too with ſucceſs. Beſides, all the objections commonly made, either to couching, or to Daviel's method, are obviated by it; for, whether the Cataract be firm or ſoft, adhering, or looſe, a membrane in the aqueous humour, or an opacity of the lens, or of its capſule, it makes no odds: neither, in this way, can the lucid cornea, or iris, be injured with any degree of probability.

Objections have been made to this operation; but ſcarce any that deſerve notice. Experience alone can ſhew its diſadvantages. The cutting of larger veſſels, than are to be met with in the cornea lucida, may be of uſe; topical bleedings, we know, rather prevent, than occaſion, inflammations; and the blood will ooze out

at

at the opening, and not blend with the vitreous humour.

The Description of the Cutting Forceps.

Fig. vi.

This inſtrument is repreſented of the natural ſize *. It is five inches long: and its external ſtructure is diviſible into two parts, a forceps, and a cylindrical tube. Theſe contain two other parts, to wit, a ſpiral ſpring, and knife, or lancet. Each ſhall be deſcribed, according to the order in which they are here mentioned.

The forceps is made in this manner. Two plates are ſoldered to the ſame end of a cylindrical tube, but oppoſite to each

* All the nine figures, in the plate, are repreſentations of the natural ſize.

other

other, and within the bore. Theſe plates, therefore, form the legs of the forceps. Each leg is about two inches long; and begins with a narrow neck, which, in length, as well as breadth, meaſures two eights of an inch. It then becomes broader, meaſuring, both ways, three eights of an inch. After this, it tapers gradually till it becomes an eighth of an inch broad; when it continues of an equal width to the point, which is for about half an inch. The point is rounded. The legs of the forceps are very thin, and extremely well poliſhed; only the internal ſurface of each, at the ſmall extremity, or toe, is ſcabrous: and about the middle of each, internally, there is a ſhort pin.—The tubular part of the forceps, is about half an inch long: and, near its upper end, there is a tranſverſe ſlit, which is terminated, at one end, by an internal perpendicular groove.

The

The ſecond part of this inſtrument is a tube, whoſe length is three inches, and bore about two tenths of an inch. This long tube is very ſlender; a good deal more ſo than the other, which is the connecting medium of the whole. About two tenths of an inch from its lower end, there is a ſmall ſhort pin. This long tube is ſo contrived, as to ſlide exactly within the bore of the tubular part of the forceps, the pin correſponding to the groove. And, after it is fully introduced, the one tube being turned a little within the other, both are ſecured together by means of the pin, which now lodges in the tranſverſe ſlit.—The broad part of the forceps is intended as a lodgment for the blade of the knife; and the knobs, obſervable in the figure, are productions from the blade, which ſhall be ſpoken to afterwards.

FIG.

FIG. VII.

Exhibits a view of the ſpiral ſpring.

This ſpiral ſpring is made of ſteel wire*. It is nearly of an equal length with the long tube. The threads are about a line diſtant from each other. And the tranſverſe diameter of the ſpring correſponds to the bore of the tube. The ſpring muſt be made of very ſmall wire; otherwiſe it will be too ſtiff for the purpoſe.

* All the parts of this inſtrument, except the ſpring and knife, are made of braſs.

P FIG.

FIG. VIII.

Exhibits a view of the knife.

The blade is of a triangular ſhape. At its upper part, excluſive of the knobs, it is five lines broad. It then tapers very quickly to its point; ſo that it is not four lines long. There are ſmall horizontal knobs, jetting out from each upper angle, which ſerve a double purpoſe, namely, for pulling down the knife, when the inſtrument is to be uſed, and for keeping it from plunging altogether into the body of the eye, when making the inciſion —The ſtalk of this knife is very ſlender, and equal in length to the two tubes when joined together. A tranſverſe ſection of it is quadrangular; except at its upper extremity, which is formed into a male ſcrew. Upon this is fixed, by a female ſcrew, through its center, a ſmall

ſmall round plate. This plate, as to breadth, correſponds exactly with the bore of the long tube; ſo that it may ſlide eaſily backward and forward within it. Its uſes are to make the knife move ſteadily and eaſily, between the legs of the forceps; and to draw together the threads of the ſpring, when the knife is pulled down.—About a quarter of an inch from the blade there is a row of three notches, or blind holes, on each ſide of the ſtalk, oppoſite to the legs of the forceps. Theſe notches correſpond to the pins in the forceps, in order to ſecure the knife from ſlipping, when it is brought down to its proper place for operating, as in

FIG. IX.

The parts of the inſtrument, thus deſcribed, are conſtructed in the following manner.

The

The blade of the knife is lodged within the forceps, the ſtalk having been put through the tubular part of it; the ſpiral ſpring is put upon the ſtalk; the plate is ſcrewed on; and, laſtly, the whole being introduced into the long tube, it is ſlid into the ſhort one, in the manner which has been deſcribed.—While the inſtrument is in this ſituation, the blade of the knife lies concealed in the broadeſt part of the forceps, as has been already obſerved (FIG. 6.). But, when it is to be uſed, the blade is pulled down, ſo that its point may project a little beyond the extremity of the forceps (FIG. 9.). In order to this, you are to hold the inſtrument in one hand, and pull down the knife with the other, by reſting your forefinger upon one knob, and your thumb upon the other. After the knife is brought down to its place, you muſt keep a firm hold of it, by means of the forceps, in the ſame manner that a pen is held.—

held.—As ſoon as the preſſure is taken off from the legs of the forceps, the ſpring, by its elaſticity, returns to its former length; and, of courſe, the knife recedes within the broadeſt part of the forceps, as before.

F I N I S.

Fig. 1.
Fig. 2. A.
Fig. 2. B.
Fig. 3.
Fig. 4.
Fig. 5.
Fig. 6.
Fig. 7.
Fig. 8.
Fig. 9.
A
B
C
D
E